

11729.1 contg

TTAGAGAGGC...TAAGGAAGAAGAGTTAAAAGCAGCAAAGGTTTTTTTGT  
TTTGTITTTGTT...TTTGAGATGGAGTCTCACTCTGTTGCCCAATGGAGTACAACGGCA  
TGATCTCAGCTC...TGCAACCTCCGCTCCACGTTCAAGTGATCTCCTGCCTCAGCCTCC  
CAAGTAGCTGGG...TTACAGGCGCCCGCCACCACGCTCAGCTAATTTTTTTGTATTTTAGT  
AGAGACAGGGTTTCACCAGGTGGGCCAGGCTGCTCTTGAACCTCCTGACCTCAGGTGATCCA  
CCCQCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACGCCCGGCCCAA  
AGCTGTTTCTTTTGTCTTTAGCGTAAAGCTCTCCTGCCATGCAGTATCTACATAACTGACGT  
GACTGCCAGCAAGCTCAGTCACTCCGTGGTC

11729-45.21.21.cons1

TAGGATGTGTTGGACCCTCTGTGTCAAAAAAAAAACCTCACAAAGAATCCCCTGCTCATTACA  
GAAGAAGATGCATTTAAATATGGGTTATTTCAACTTTTTATCTGAGGACAAGTATCCAT  
TAATTAATTGTGTCAGAAGAGATTGAATACCTGCTTAAGAAGCTTACAGAAGCTATGGGAG  
GAGGTTGGCAGCAAGAACAATTTGAACATTATAAAATCAACTTTGATGACAGTAAAAATG  
GCCTTTCTGCATGGGAACCTTATTGAGCTTATTGGAAATGGACAGTTTAGCAAAGGCATGGA  
CCGGCAGACTGTGTCTATGCCAATTAATGAAGTCTTTAATGAACCTTATATTAGATGTGTTA  
AAGCAGGGTTACATGATGAAAAAGGGCCACAGACGGAAAAACTGGACTGAAAGATGGTT  
TGTACTAAAAACCAACATAAATTTCTTACTATGTGAGTGAGGATCTGAAGGATAAGAAAGG  
AGACATTCTCTTGGATGAAAAATTCCTGTGTAGAGTCTTGCCTGACAAAGATGGAAA

11729-45.21.21.cons2

TTAGAGAGGCACAGAAGGAAGAAGAGTTAAAAGCAGCAAAGCCGGGTTTTTTTGTITTTGT  
TTTGTITTTGTTTGTITTTGAGATGGAGTCTCACTCTGTTGCCCAAGCTCGAGTACAACGGCA  
TGATCTCAGCTCGCTGCAACCTCCGCTCCACGTTCAAGTGATCTCCTGCCTCAGCCTCC  
CAAGTAGCTGGGATTACAGGCGCCCGCCACCACGCTCAGCTAATTTTTTTGTATTTTAGT  
AGAGACAGGGTTTCACCAGGTGGGCCAGGCTGCTCTTGAACCTCCTGACCTCAGGTGATCCA  
CCCCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGACCCACCACGCCCGGCCCAA  
AGCTGTTTCTTTTGTCTTTAGCGTAAAGCTCTCCTGCCATGCAGTATCTACATAACTGACGT  
GACTGCCAGCAAGCTCAGTCACTCCGTGGTC

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TCTTTTCTTTTGAATTTCTTCAATTTGTACGTTTGATTTTATGAAGTTGTTCAAGGGCTAA  
CTGCTGTGTAATATAGCTTTCTCTGAGTTCTTCACTGATTGTTAAATGAATCCATTCTG  
AGAGCTTAGATGCAGTTTCTTTTCAAGGCACTAATTTGTCTTTAAGTCTTTGGCATAAT  
TCTTCTTTTCTGATGACTTTTATGAAGTAACTGATCCCTGAATCAGGTGTGTTACTGAG  
CTGCATGTTTTTAAATCTTTTCTTAAATAGCTGCTTCTCAGGCAACAGATAGATAAGCTTAT  
TTTGATATTCTTAAAGCTCTTGTGAAGTTGTTTCAATTTCCATAATTTCCAGGTACACTGT  
TTATCCAAAACCTTCTAGCTCAGTCTTTTGTGTTTCTGTTTCTGATTTGGACATCTTGTAGTCTG  
CTTCAATCTGCTGATGXTTCCATTCAGTCTTCCAGTTCCAGGTGGAGACTTTXCTTTCT  
GGAGCTCAGCCTGACAAATGCCTTCTTGTCTTCT

FIG. 1A

000T80-1089E960

## 11731.2contig

AGCCAGATGGAGAGCTGCAAGAAGAAGTCAGGATCATGCGCTCAGTTTCCACAG  
CGATGAATGGAGGGCCAAATATGTGGGCTATTACATCTGAAGAACGTACTAAGCATGATA  
AACAGTTTGATAACCTCAAACCTTCAGGAGGTTACATAACAGGTGATCAAGCCCGTACTTT  
TTTCTACAGTCAGGTCTGCCGGCCCCGGTTTTAGCTGAAATATGGGCCTTATCAGATCTG  
AACAAGGATGGGAAGATGGACCAGCAAGAGTTTCTCTATAGCTATGAAACTCATCAAGTTA  
AAGTTGCAGGGCCAACAGCTGCCTGTAGTCCTCCCTCTATCATGAAACAACCCCTATGT  
TCTCTCCACTAATCTCTGCTCGTTTTGGGATGGGAAGCATGCCCAATCTGTCCATTATCAG  
CCATTGCCTCCAGTTGCACCTATAGCAACACCTTGTCTTCTGCTACTTCAGGGACCAGTAT  
TCCTCCCTAATGATGCCTGCTCCCTAGTGCCTTCTGTTAGTA

## 11734.1contig

AATAGATTTAATGCAGAGTGTCAACTTCAATTGATTGATAGTGGCTGCCTAGAGTGCTGTG  
TTGAGTAGGTTTCTGAGGATGCACCTTGGCTTGAAGAGAAAGACTGGCAGGATTAACAAT  
ATCTAAAATCTCACTTGTAGGAGAAACCACAGGCACCAGAGCTGCCACTGGTGCTGGCAC  
CAGCTCCACCAAGGGCCAGCGAAGAGCCCAAATGTGAGAGTGGCGGTGAGGCTGGCACCAG  
CACTGAAGCCACCCTGGTGCTGGCACTGGCACTGGCACTGTTATTGGTACTGGTACTGGC  
ACCAGTGCTGGCACTGGCACTCTCTTGGGCTTTGGCTTTAGCTTCTGCTCCCGCTGGATCC  
GGGCTTTGGCCCAAGGGTCCGATATCAGCTTCGTCCCAAGTTGCAGGGCCCCGGCAGCAATTCTC  
CGAGCCGAGCCCAATGCCCAATCGAGCTCTAATCTCGCCCTAGCCTTGGCTTCAGCTGCA  
GCCTCAGCTGCAGCCTTCAAATCCGCTTCCATCGCCTCTCGGTAC

## 11734.2contig

GCCAAGAAAGCCCCAAAGGTGAAGCACTCTGGATGGGGAAGAGGATGGCAGCAGTGATCA  
GAGTCAGCCTTCTGGAACCCACAGGTGGCCGAAGGGTCTCAAAGGCCCTAATGGCCTCAAT  
GGCCCCCAGGGCTTCAAAGGGGTCCCATAGCCTTTGGGCCCCGAGGGCATCAAGGACTCG  
GTTGGCTGCTTGGCCCCGGAGAGCCTTCTCTCCCTGAGATCACCTAAAGCCCGTAGGGGC  
AAGCCTCGCCGTAGAGCTGCCAAGCTCCAGTCAATCCCAAGAGCCTGAAGCACCACCCT  
CGGGATGTGCCCTTTTGCAGGGAGCCCAAAATGATTTGGTGAAGTACCTTTTGCTAAAG  
ACCAGACGAAGATTCCCATCAAGCGGTGGGACATGCTGAAGGACATCATCAAAGAATACA  
CTGATGTGTACCCCGAAATCATTCAGCAGCAGGCTATTCCTTGGAGAAGGTATTTGGGAT  
TCAATTGAAGGAAATGATAAGAAATGACCCTGTACATTCTTCTCAGC

## 11736.1contig

GAGGTCTCACTATGTTGCCAGGCTGTCTTGAACCTCCTGGGATCAAGCAATCCACCCATG  
TTGCTCTCCAAAAGTGCTGGGATCATAGCGGTGAGCCACCTCACCCAGCCACCAATTTTCA  
ATCAGGAAGACTTTTTCTTCTTCAAGAGTGAAGCGTTTCCAGAGTATAGCTACACTATT  
GCTTGCTGAGGGTGACTACAAAATTCCTTGCTAAAAGGTTAGGATGGGTAAAGAAATTAG  
ATTTTCTGAATGCAAAAATAAAATGTGAACATAATGAACCTTAGGTAATACATATTCATAAA  
ATAATTATTCACATATTCCTGATTTATCACAGAAATAATGTATGAAATGCTTTGAGTTTCT  
TGGAGTAAACTCCAATCTCATCCCAAGAAACCATATTATAAGTATCACTGATAATAAGAA  
CAACAGGACCTTGTCTATAAATCTGGATAAGAGAAATAGTCTCTGGGTGTTTGTCTTAAAT  
TGATAAAAATTTACTTGTCCATCTTTAGTTTCAAGATCACAAAA

FIG. 1B

11736.2contig

AAGCGGAAATGAGAAACGAGGGGAAAATCATGTGGTATTGAGCGGAAAACCTGCTGGATGA  
CAGGGCTCAGTCCTGTTGGAGAACTCTGGGTGGTGTGTAGAACAGGGCCACTCACAGTG  
GGGTGCACAGACCAGCACGGCTCTGTGACCTGTTTGTACAGGTCCATGATGAGGTAAAC  
AATACACTGAGTATAAGGGTTGGTTTAGAAACTCTTACAGCAATTTGACAAAAGTAATCTTC  
TGTGCAGTGAATCTAAGAAAAAAATTGGGGCTGTATTTGTATGTTCCCTTTTTTTCATTTTCAT  
GTTCTGAGTTACCTATTTTTATTGCATTTTACAAAAGCATCCTTCCATGAAGGACCGGAAGT  
TAAAAACAAGCAGGTCTTTATCACAGCACTGTCTGTAGAACACAGTTTCAGAGTTATCCAC  
CCAAGGAGCCAGGGAGCTGGGCTAAACCAAGAATTTTGCTTTTGGTTAATCATCAGGTA  
CTTGAGTTGGAATTGTTTTAAATCCCATCATACCAGGCTGGAXGTG

11739-1&2

CCGCGGCTCCTGTCCAGACCCTGACCCTCCCTCCCAAGGCTCAACCGTCCCCCAACAAACCG  
CCAGCCTTGTAAGCAAAAGGTTGGACA.ACTACTTTTCCAGAACAGAAAGGAAACTCATGCAT  
GAGACATTCAAGCAAAAGGTTGGACA.ACTACTTTTCCAGAACAGAAAGGAAACTCATGCAT  
CAGAAAAGGTGACTAATAAAGGTACCAGAAGAATATGGCTGCACAAATACCAGAATCTGA  
TCAGATAAAACAGTTTAAAGGAAATTTCTGGGGACCTACAATAAACTTACAGAGACCTGCTTT  
TTGGACTGTGTTAGAGACTTCACAACAAAGAGAAGTAAAACCTGAAGAGACCACCTGTTCA  
GAACATTGCTTACAGAAATATTTAAAAATGACACAAGAATATCCATGAGATTTTCAGGAA  
TATCATATTCAGCAGAATGAAGCCCTGGCAGCCAAAGCAGGACTCCTTGGCCAACCACGA  
TAGAGAAGTCTGTATGATGAACCTTTGATGAAAGATTGCCAACAGCTGCTTTATTGGAAA  
TGAGGACTCATCTGATAGAATCCCTGAAAGCAGTAGCCACCATGTTCAACCATCTGTGCAT  
GACTGTTTGGCAAATGGAAACCGCTGGAGAAACAAAATTGCTATTTACCAGGAATAATCA  
CAATAGAAGGTCTTATTTGCTGAGTGAATAATAAGATGCAACATTTGTTGAGGCCTTATGA  
TTCAGCAGCTTGGTACTTCAATTAGAAAAATAAACCAATGTTTCTTCAATTTGTGACTGTTA  
ATTTTAAAGCAACTTATGTTGTCGATCATGTATGAGATAGAAAAATTTTTATTACTCAAAG  
TAAAAATAAATCGA

11740.1.contig

GAAAAAAATATAAAACACACTTTTCCGAAAACGGTGGCCCTAAAAGACGAAAAGAAATTT  
CACCAATATAAATCCAATTTTATGAAAACCTGACAATTTAATCCAAGAATCACTTTTGTAAA  
TGAAGCTAGCAAGTGATGATATGATAAAAATAAACGTGGAGGAAATAAAAAACACAAGACTT  
GGCATAAGATATATCCACTTTTGATAATAAACTTGTGAAGCATATTCTTCGACAAATTGTG  
AAAGCGTTTCTGATCTTGCTTGTCTCCATTTCAAATAAGGAGGCATATCACAATCCCAAGA  
GTAATCAGAAAAAGAAAAAGACATTTTGCATTTTGAGATGAACCAAAAGACACAAAACAA  
AACGAACA.AAGTGTATGTCTAAATCTAGCCCTCTGAAATAAACCTTGAACATCTCCTACAA  
GGCACCGTGATTTTGTAAATCTAACCTGAAGAAATGTGATGACTTTTGTGGACATGAAAA  
TCAGATGAGAAAACCTGTGGTCTTTCCAAAGCCTGAACTCCCTGAAAACCTTTGCA

FIG. 1C

10676801.034000

11766.2.contig

11-3.2.contig

11-5-182

[illegible]

FIG. 1D

11777.1&2.cons

CAGACGGGGTTTCACTATGTTGGCTAGGCTGGTCTTGAACCTCTGACTTCAGGTGATCTGC  
CTGCCTTGGCCTCCCAAAGTCCTGGGATTACAGGCATAAGCCACTGCGCCCCGGCTGATCTG  
ATGGTTTCATAAGGCTTTTCCCCCTTTTGTCTCAGCACTTCTCCTTCTGCGCCCATGTGAAG  
AAGGACATGTTTGTCTCCCTTCCACCACGATTGTAAGTTGTTTCTGAGGCCTCCCCGGCC  
ATGCTGAACCTGTGAGTCAATTAACCTCTTTCTTTATAAAATTATCCAGTTTTGGGTATGTC  
TTTATTAGTAGAATGAGAACAGACTAATAACAACCTTAAAGGAGACTGACGGAGAGGATT  
CTTCTGGATCCCAGCACTTCTCTGAATGCTACTGACATTCTTTGAGGACTTTAAACTG  
GGAGATAGAAAACAGATTCCATGGCTCAGCAGCCTGAGAGCAGGGAGGGAGCCAAGCTA  
TAGATGACATGGGCAGCCTCCCCGAGGGCAGGTGTGGCCGAACCTGGGCAGTGCTGCAC  
CCACCCACCAGGGCCAAGTCTGTCTTGGAGAGCCAAGCCTCAATCACTGCTAGCCTCA  
AGTGTCCCCAAGCCACAGTGGCTAGGGGGACTCAGGGAACAGTTCCCAGTCTGCCCTACTT  
CTCTTACCTTTACCCCTCATACCTCCAAAGTAGACCATGTTTATGAGGTCCAAAGG

11779.2.contig

AAGCGAGGAAGCCACTGCGGCTCCTGGCTGAAAAGCGGCGCCAGGCTCGGGAACAGAGG  
GAACCGGAAGAACAGGACCGGAAGCTGCAGGCTGAAAGGGACAAGCGAATGCGAGAGG  
AGCAGCTGGCCCCGGGAGGCTGAAGCCCCGGGCTGAACGTGAGGCCGAGGCGCGGAGACGG  
GAGGAGCAGGAGGCTCGAGAGAAGCCGCAAGCCTGAGCAGGAGGAGCAGGAGCGACTGCA  
GAAGCAGAAAAGAGGAAGCCGAAGCCCCGCTCCCGGGAAGAAGCTGAGCGCCAGCGCCAGG  
AGCGGGAAAAGCACTTTCAGAAAGCAGGAACAGGAGAGACAAGAGCGAAGAAGCGGCTG  
GAGGAGATAATGAAGAGGACTCGGAAATCAGAAGCGGCGGAACCAAGAAGCAGGATGC  
AAAGGAGACCGCAGCTAACAAATCCCGCCAGACCTTGTGAAAGCTGTAGAGACTCGGC  
CCTCTGGGCTTCCAGAAAGCAATCTATTGACAGAAAGGAAGGAGCTTGGCCCCCAXGGA

11781 & 37.cons

CTCTGTGGAAAACCTGATGAGGAATGAATTTACCAATTACCCATGTTCTCATCCCCAAGCAAA  
GTGCTGGGTCTGATTACTGCCAACACAGAGAACGAAGAAGAAGCTTTTCTCATACAGGATC  
AGCAGGGCCTCATCACTGGGCTGGATTCTACTCACCACACAGACCGGCTTTCTCTC  
CAGTGTGACCTACACACTCACTGCTCTTACCAGATGATGTTGCCAGAGTCAGTAGCCATT  
GTTTGTCCCCCAAGTTCCAGGAAGCTGGATTCTTTAACTAACTGACCATGGACTAGAGG  
AGATTTCTTCTGTGCGCCAGAAAGGATTTTCATCCACACAGCAAGGATCCACCTCTGTTCTG  
TAGCTGCAGCCACGTGACTGTTGTGACAGAGCAGTGACCATCACAGACCTTCGATGAGC  
GTTTGAGTCCAACACCTTCCAAGAACAAACAAAACCATATCAGTGTACTGTAGCCCCCTTAAT  
TTAAGCTTTCTAGAAAGCTTTGGAAGTTTTGTAGATAGTAGAAAGGGGGGCATCACXTGA  
GAAAGAGCTGATTTTGTATTTAGGTTTTGAAAAGAAATAACTGAACATATTTTTTAGGCAA  
GTCAGAAAGAGAACATGGTCAACCCAAAGCAACTGTAACCTCAGAAATTAAGTTACTCAGA  
AATTAAGTAGCTCAGAAAATTAAGAAAGAAATGGTATAATGAACCCCATATACCCCTTCTTC  
TGGATTACCAAATGTTAACATTTTTCTCTCAGCTATCCTTCTAAATTTCTCTCTAAATTC  
AATTTGTTTATATTTACCTCTGGGCTCAATAAGGGCATCTGTGCAGAAATTTGGAAGCCAT  
TTAGAAAAATCTTTTGGATTTTCTCTGCTTTATGGCAATATGAATGGAGCTTATTACTGGG  
GTGAGGGACAGCTTACTCCATTTGACCAGATTGTTGGCTAACACATCCCGAAGAATGATT  
TTGTCAGGAATTAATGTTATTAATAAATAATTCAGGATATTTTTCTCTACAATAAAGTAA  
CAAT

FIG. 1E

11781-76-87-37

CTCTGTGGAAAACCTGATGAGGAATGAATTTACCATTACCCATGTTCTCATCCCCAAGCAAA  
GTGCTGGGTCTGATTACTGCAACACAGAGAACGAAGAAGAACTTTTCTCATACAGGATC  
AGCAGGGGCTCATCAGACTGGGCTGGATTCACTACCCACACAGACCGGTTTCTCTC  
CAGTGTGCGACCTACACACTCACTGCTCTTACCAGATGATGTTGCCAGAGTCAGTAGCCATT  
GTTTGCTCCCCCAAGTTCCAGGAACTGGATTCTTTAACTAACTGACCATGGACTAGAGG  
AGATTTCTTCTGTGCGCCAGAAAGGATTTCATCCACACAGCAAGGATCCACCTCTGTTCTG  
TAGCTGCAGCCACGTGACTGTTGTGGACAGAGCAGTGACCATCACAGACCTTCGATGAGC  
GTTTGAGTCCAACACCTTCCAAGAAACAACAAAACCATATCAGTGTAAGTGTAGCCCCCTTAAT  
TTAAGCTTTCTAGAAAGCTTTGGAAGTTTTGTAGATAGTAGAAAGGGGGGCATCACCTGA  
GAAAGAGCTGATTTTTGTATTTAGGTTTGAAAAGAAAATACTGAACATATTTTTAGGCAA  
GTCAGAAAGAGAATCATGGTCACCCAAAAGCAACTGTAAGTCAAGAAATTAAGTTACTCAGA  
AATTAAGTAGCTCAGAAATTAAGAAAGATGGTATAATGAACCCCATATACCCCTTCCTTC  
TGGATTACCAATTGTTAACATTTTTCTCTCAGCTATCCTTCTAAATTTCTCTAATTTTC  
AATTTGTTTATATTTACCTCTGGGCTCAATAAGGGCATCTGTGCAGAAATTTGGAAGCCAT  
TTAGAAAATCTTTTGGATTTTCTGTGTTTATGGCAATATGAATGGAGCTTATTACTGGG  
GTGAGGGACAGCTTACTCCATTTGACCAGATTGTTGGCTAACACATCCCCGAAGAATGATT  
TTGTCAGGAATTAATGTTATTTAATAAATAATTCAGGATATTTTCTCTACAATAAAGTAA  
CAATTA

11784-1 & 2

GGACGACAAGGCCATGGCGATATCGGATCCGAATTCAAGCCTTTGGAATTAATAAACCCT  
GGAACAGGGAAGGTGAAAGTTGGAGTGAGTCTTCCATATCTATACCTTTGTGCACAGT  
TGAATCGGAACCTGTTTGGGTTTAGGGCATCTTAGAGTTGATTGATGGAAGGAGCAGACAG  
GAACTGGTGGGAGGTCAAGTGGCGAAGTTGCTGAATGTGGAATAACTTACCTTTGTGCTC  
CACTTAAACCAGATGTGTTCCAGCTTTCTGACATGCAAGGATCTACTTTAATTCACACT  
CTCATTAATAAATTGAATAAAAGCGAATGTTTGGCACCTGATATAATCTGCCAGGCTATG  
TGACAGTAGGAAGGAATGCTTTCCCTTAACAAGCCCCAATGCACTGGTCTGACTTTATAAAT  
TATTTAATAAAATGAACATAATC

11785.2.contig

GGCAGTGACATTCACCATCATGGGAACCCACCTTCCCTTTTCTTCAGGATTCTCTGTAGTGG  
AAGAGAGCACCCAGTGTGGGCTGAAAACATCTGAAAGTAGGGAGAAGAACCCTAAAATA  
ATCAGTATCTCAGAGGGCTCTAAGGTGCCAAGAAGTCTCACTGGACATTTAAGTGCCAAC  
AAAGGCATACTTTCCGGAATCGCCAACTCAAACTTTCTAAGTCTGTCTCTCTCAGAGACA  
AGTGAGACTCAAGAGTCTACTGCTTAACTGGCAACTACAGAAAAGTGGTGTACCCAGAA  
AAACAGGAGCAATTAGAAATGGTCCAAATTTCAAGCTCCGCAAAACAGGATGTGCTTT  
CCTTTGCCCAATTAAGGTTTCTCTCTTTCTCTTTTATTAACT

FIG. 1F

TGCGCTGAAAAC.AACGGCCTCCTTTACTGTTAAATGCAGCCACAGGTGCTTAGCCGTGGG  
 CATCTCAACCACCAGCCTCTGTGGGGGGCAGGTGGGCGTCCCTGTGGGCCTCTGGGCCCAC  
 GTCCAGCCTCTGTCTCTGTGCTTCCGTTCTTCGACAGTGTCCCGGCATCCCTGGTCACTTG  
 GTACTTGGCGTGGGCCTCCTGTGCTGCTCCAGCAGCTCCTCCAGGXGGTGGCCCCGCTTCA  
 CCGCAGCCTCATGTTGTGTCCGGAGGCTGCTACGGCCTCCTCCTTCGCGAGGGCTGT  
 CTTACCCCTCCGGXGCACCTCCTCCAGCTCCAGTGCTGGCGGGCCTGCAGCGTGGCCAGC  
 TCGGCCTTGGCCTGCCGCGTCTCCTCCTCARAGGCTGCCAGCCGGTCTCGAACTCCTGGC  
 GGATCACCTGGGCCAGGTTGCTGCGCTCGCTAGAAAGCTGCTCGTTACCGCCTGCGCATC  
 CTCCAGCGCCCGCTCCTTCTGCCGCA.AAGGCCCTGCAGACGCAGATTCTCGCCCTCGGCATC  
 CCCC.AAGCTGGCCCTTCAGCTCCGAGCACCGCTCCTGAAGCTTCCGCTCCGACTGCTCCAG  
 CTGGGAGAGCTCGGCCTCGTACTTGTCCCGTAAGCGCTTGATGCGGCTCTCGGCAGCCTTC  
 TCACTCCTCCTTGGCCAGCGCCATGTGCGCCTCCAGCCGGTGAATGACCAGCTCAATCT  
 CTTGTCCCGGCCCTTTCGGATTCTTCCCTCAGCTCCTGTTCCCGGTTACGACGCCACGCC  
 TCCTCCTTCTGGTGCGGGCCGGCCTCCACGGCTGCCTCTCCAGCTCCAGCTGCTGCTTCA  
 GGTATTCAGCTCCATCTGGCGGGCCTGCAGCGTGGCCA

13690.4

CAACTTATTACTTGAAATTATAATATAGCCTGTCCGTTTGTGTTTCCAGGCTGTGATATAT  
 TTTCTAGTGTTTGACTTTAAAAATAAATAAGGTTTAAATTTCTCCCC

13693.1

TGCAAGTCACGGGAGTTTATTTAATTAATTTTCCCCAGATGGAGACTCTGTGCGCCAGG  
 CTGGAGTGCAATGGTGTGATCTTGGCTCACTGCAACCTCCACCTCCTGGGTTCAAGCGATT  
 CTCTGCCACAGCCTCCCGAGTAGCTGGGATTACAGGTGCCCCGCCACCACACCCAGCTAAT  
 TTTTATATTTTAGTAAAGACAGGGTTTCCCCATGTTGGCCAGGCTGGTCTTGAACCTTCTGA  
 CCTCAGGTGATCCACCTGCCCTCGCCCTCCCAAGTGTGGGATTACAGCGGTGAGCTACCC  
 GTGCCTGCCCCAGCCACTGGAGTTAAAGGACAGTCATGTTGGCTCCAGCCTAAGCGGCCA  
 TTTTCCCCCATCAGAAAGCCCGCGGCTCCTGTACCTCAAAATAGGGCACCTGTAAAGTCAG  
 TCAGTGAAGTCTCTCCTCTAACTGGCCACCCCGGGCCATTGGCNTCTGACACAGCCTTGCC  
 AGGANGCCTGCATCTGCAAAAGAAAGTTCACTTCTTTCCG

13694.1

CAGAGAATCTKAGAAAGATGTCCTCCCTTTCTTTTAAATGAATGAGAGAAGCCCCATTTGTATC  
 CCTGAATCATTCAGAAAAGCGCGCGCTGGCGACAGCGCGGACCTAGGGATCGATCTGGAG  
 GGACTTGGGGAGCGTGCCAGAGACCTCTAGCTCGAGCGCGAGGGACCTCCCGCCGGGATGC  
 CTGGGGAGCAGATGGACCTACTGGAAGTCAGTTGGATTACAGATTTCTCTCAGCAAGATAC  
 TCTTGGCCTGATAATTGAAGATTCTCAGCCTGAAAGCCAGGTTCTAGAGGATGATTCTGGT  
 TCTCACTTCAGTATGCTATCTCGACACCTTCTTAATCTCCAGACGCACAAAGAAAATCCTG  
 TGTGGATGTTGNGTCCAATCCTTGAACAAACAGCTGGAGAAGAACGAGGAGACCGGTAA  
 TAGTGGGTTCAATGAACATTTCAAAAGAAAACCAGGTTGCAGACCCTG

FIG. 1G

13694.2

GACTGTCTCTGAACAAGGGACCTCTGACCAGAGAGCTGCAGGAGATGCAGAGTGGTGGCAG  
GAGTGGAAAGCCAAAGAACACCCACCTTCTCCCTTGAAGGAGTAGAGCAACCATCAGAAG  
ATACTGTTTTATTGCTCTGGTCAAACAAGTCTTCTGAGTTGACAAAACCTCAGGCTCTGGT  
GACTTCTGAATCTGCAGTCCACTTTCCATAAGTTCTTGTGCAGACAACCTGTTCTTTTGCTTC  
CATAGCAGCAACAGATGCTTTGGGGCTAAAAGGCATGTCCTCTGACCTTGCAGGTGGTGG  
ATTTTGCTCTTTTACAACATGTACATCCTTACTGGGCTGTGCTGTCACAGGGATGTCCTTGG  
TGGACTGTTCTGCTATGGGGATATCTTCGTTGGACTGTTCTTCATGCTTAATTGCAGTATTA  
GCATCCACATCAGACAGCCTGGTATAACCAGAGTTGGTGGTTACTGATTGTAGCTGCTCTT  
TGCCACTTCATATGGCACAAGTATTTTCTCAACATCCTGGCTCTGGGAAG

13695.1

GAAATGTATATTTAATCATTTCTCTTGAACGATCAGAAGCTCTRAATCAGTTTTCTATAACAR  
CATGTAATACAGTCACCGTGGCTCCAAGGTCCAGGAAGGCAGTGGTTAACACATGAAGAG  
TGTGGGAAGGGGGCTGGAAACAAAGTATTTCTTTCTTCAAAGCTTCATTCCTCAAGGCCT  
CAATTCAAGCAGTCATTGTCTTGTCTTCAAAGTCTGTGTGCTTCATGGAAGGTATAT  
GTTTGTTCCTTAAATTTGAATTTGTGGCCACGAAGGGTCTGGAGATCTAAATTCAGAGTAAG  
AAAACCTGAGCTAGAAGTACAGGCTTCTCTTACAGAAGTGGCTTGCAGGGTAGAATGA  
ANGGAAAGAACTTAGAAGCTCAACAAGCTGAAGATAATCCCATCAGGCATTTCCCATAG  
GCCTTGCAACTCTGTTCACTGAGAGATGTTATCCTG

13695.2

AGTCTGGAGTGAGCAAACAAGAGCAACAACAARRAGAAGCCAAAAGCAGAAGGGTCCA  
ATATGAACAAGATAAAATCTATCTTCAAAGACATATTAGAAGTTGGGAAAATAATTCAATGT  
GAACTAGACAAGTGTCTTAAAGAGTGAATGTAATAATGACAGTGGAGACAAGTGCATCCCC  
AGATCTCAGGGACCTCCCCCTGGCTGTCACCTGGGAGTGAGAGGACAGGATAGTGCATG  
TTCTTTGTCTCTGAATTTTATGTTATATGCTGTAAATGTTGCTCTGAGGAAGCCCCCTGGAA  
AGTCTATCCCAACATATCCACATCTTATATCCACAAATTAAGCTGTAGTATGTACCCTAA  
GACGCTGCTAATTGACTGCCACTTCCCAACTCAGGGGGGGCTGCATTTTAGTAATGGGTCA  
AATGATTCACTTTTATGATGCTTCCCAAGGTGCTTGGCTTCTCTTCCCAACTGACAAATG  
CCCAAGTTGACAAAAATGATCATAATTTAGCATAAACCGAGCAATCGGGGACCCC

13697.1

TAGCTGTCTTCTCACTCTTATGGCAATGACCCCATATCTTAATGGATTAAAGATAATGAAA  
GTGTATTTCTTACACTCTGTATCTATGACCAGAAGCTGAGGTGATACCCCGCTTGTCAATTGT  
CATCCATATTCTGGGACTCAGGGGGGAATTTCTGGAATATGCCAGGGAGCAATGGCAGA  
GGGGCACAGTGCAATCTGGGGGAATGCACATTTGGCTCAGCCTGGGTAAATGAGTGATATAC  
ATTACCTCTGTTACAACTCAATGCCAGCAGCAGTCACAAGGCCCCACCAAAATACCAGAG  
CGCAAGAAATGTAGTCTCTTGTATGCTTTCTGTGTCCCAACCCAAATCTCATCTTGA  
ATTGTAAGCTCCCATAAATCCCATGTTGTGGGAGGGACCTGGTG

FIG. 1H

09636801.031000



13697.2

ATCATGAGGATACCAAAGGGATGGTACTAAACCATTTGTGTCTGTITTCACACT  
GCTTTGAAGATACTACCTGAGACTGGGTAATTTATAAACAAAAGAGATTTAATTGACTCAC  
AGTTCTGCATGGCTGAAGAGGCTCAGGAACTTACAGTCATGGTGGAAAGGCAAAGGAGG  
AGCAAGGCATGTCTTACATGTCAGTAGGAGAGAGCGAGAGCAGGAGAACCTGCCACTT  
ATAAACCATTCAGATCTCATACTCCCTATCATGAGAAAAACATGGAGGAAACCACCCTC  
ATGATCCAATCACCTCCCGCCAGGTCCCTCCCTCGACACGTGGGGATTATAATTGAGGATT  
AGAGGGACACAGAGACAAACCATATCATCATTCATGAGAAATCCACCCTCATAGTCCAAT  
CAGCTCTACCAGGCCCCACCTCCAACACTGGGGATTGCAATTCAACATGAGATTGGATG  
GGGACACAGATTCAAACCATATCATAC

13699.1&2

CATGGCCTTTCTCCTTAGAGGCCAGAGGTGCTGCCCTGGCTGGGAGTGAAGCTCCAGGCAC  
TACCAGCTTTCCTGATTTTCCCGTTTGGTCCATGTGAAGAGCTACCACGAGCCCCAGCCTCA  
CAGTGTCCTCAAGGGCAGCTTGGTCTCTTGTCTGTCAGAGGCAGGCTGGTGTGACCCT  
GGGAACTTGACCCGGGAACAACAGGTGGCCAGAGTGAGTGTGGCCTGGCCCCCTCAACCT  
AGTGTCCTCTCTCTCTCTCTGGAGCCAGTCTTGAGTTTAAAGGCATTAAGTGTAGATA  
CAAGCTCCTTGTGGCTGGAAAAACACCCCTCTGCTGATAAAGCTCAGGGGGCAGTGGGA  
AGCAGAGGCCCTTGGGGGTCCCTCTCTGAAGAGAGCGTCAGGCCATCAGCTCTGTCCCTC  
TGGTCTCTCCACGTCTGTCTCTCACCCTCCATCTCTGGGAGCAGCTGCACCTGACTGGCCAC  
GCGGGGGCAGTGGAGGCACAGGCTCAGGGTGGCCGGCTACCTGGCACCTATGGCTTAC  
AAAGTAGAGTTGGCCAGTTTCTCTCCACTGAGGGGAGCAGTCTGACTCCTAACAGTCTT  
CCTTGGCCTGCCATCATCTGGGGTCCCTGGCTGTCAAGAAAGGCCGGGCATGCTTTCTAAA  
CACAGCCACAGGAGGCTTGTAGCCCATCTTCCAGGTGGGGAAACAGTCTTAGATAAGTAA  
GGTCACTTGCCTAAGCCCTCCAGCACCTTGATCTTGGAGTCTCACAGCAGACTGCATGT  
SAACAACCTGCAACCGAAAAACATGCTCAGTATAAAA

13703.3

CCAGAACCTCCTTCTCTTTCGAGAAATGCGGAGGCCTCTTGGAGACACAGAGGGTTTCACCT  
TGGATGACCTCTAGAGAAAATGCCCCAAGAGCCACCTTCTGGTCCCAACCTGCAGACCCC  
ACAGCAGTCAGTTGGTCAGCCCTCTCTCTAGAAAGGTCACTTGGCTCCATTGCCTGCTTCCA  
ACCAATGGGCAGGAGACAAGCCCTTATTTCTGCCCCACCCATTCTCCTGTACCAGCACCT  
CCGTTTTCACTCAGYGTGTCTCAGCAACCGTACCGTTTACACAGTCA

13705.1

TGCATGTAGTTTTATTTATGTGTTTTGTCTGGAAAAACCAAGTGTCCACGACCATGACTGA  
ACATCACTCACTTCCCTACTTGTATCTACAAGGCCAACGCCGAGAGCCCAGACCAGGATTC  
CAACACACTGCACGAGAAATTTGTGGATCCGCTGTACGTAAGTGTCCGTCAGTACCCCA  
RACGCTGTTACGTGGCACATGACTGTACAGTCCCACGTAACAGCACTGTACTTTTCTCCCA  
TGAACAGTTACCTGCCATGTATCTACATGATTGAGAACAATTTGAACAGTTAATTCTGACA  
CTTGAATAATCCCATCAAAAAACGGTAAAAATCACTTTGATGTTTGTAAACGACAACATAGCAT  
CACTTTACGACAGAATCATCTGGAAAAACAGAACAAACGAATACATACATCTTAAAAAATG  
CTGGGGTGGGCCAGGCCACAGCTTCAAGGCTGTAAATCCAGCACTTTGGGAGGCTTAAGCG  
GGTG

FIG. 11

000T80T089E960

**0936303**

13707.4

15-08.1&amp;2

13709.1

[illegible]

FIG. 1J

13709.2

TATGAAGAAGGGAAAAGAAGATAATTTGTGAAAGAAATGGGTCCAGTTACTAGTCTTTGA  
AAAGGGTCAGTCTGTAGCTCTTCTTAATGAGAATAGGCAGCTTTCAGTTGCTCAGGGTCAG  
ATTTCCTTAGTGGTGTATCTAATCACAGGAAACATCTGTGGTTCCTCCAGTCTCTTTCTGG  
GGGACTTGGGCCCCACTTCTCATTTCAATTAATTAGAGGAAATAGAACTCAAAGTACAATTT  
ACTGTTGTTTAACAATGCCACAAAGACATGGTTGGGAGCTATTTCTTGATTTGTGTAAT  
GCTGTTTTTGTGTCTATAATGGTTCCAAAAATTTGGGTGCTGGCCAAAGAGAGATACTGT  
TACAGAAGCCAGCAAGAAGACCTCTGTTCAATCACACCCCCGGGATATCAGGAATTGAC  
TCCAGTGTGTGCAATCCAGTTTGCCTATCTCT

13712.1&2

TGAGGGACTGATTGGTTTGTCTCTGCTATTEAATTCCTCCCAAGCCCACTTGTTCTGCAGCG  
TCCTCCTTCTCAATCCCTTTAGTTGTACCCTCTCTTTCATCTGAGACCTTTCCTTCTTGATGT  
CGCCTTTTCTTCTTCTTGTCTTTTCTGATGTTCTGCTCAGCATGTTCTGGGTGCTTCTCATCT  
GCATCATTCCTTTCAGATGCTGTAGCTTCTTCTCTCTTCTTCTGCTCTTCTTCTTCTTCTT  
TTTTGGGGGGCTTGTCTCTGACTCCAGTTGAGGGGGCCCCAGGGTCTGGCCTTTGAGACG  
AGCCAGGAAGGGCTGTCTCTGGGCTCTAGCGGAGCAAGCTTGGCCTTCAATTGTGATCCCA  
AGACGGGCAGCCTTGTGTGCTGTTCGGCCCTCACAGGCTTGGAGCAGCATCTCATCAGTCA  
GAATCTTTGGGGACTTGGACCCCTGCTTGTCTGTCATCACTGCAGCTCTCCAAGTCTTTGTTT  
GGCTTCTCTCCACCTGAAGTCAATGTAGCCATCTTCAAACTTCTGATACAGCAAGTTGG  
GCTTGGGATGATTATAACGGGTGGTCTCTTAGAAAGGGCTCCTTATCTGTACTCCATCCTG  
CCCAGTTTCCACTACCAAGTTGGCCGAGTCTTGTGAAGAGCTCATTCCACCAGTGGTTT  
GTGAACCTCCTTGGCAGGGTCATGTCTACCCCATGAGTGTCTTGTTCAGYGTCAACCCTGA  
GAGCCTGAGTGATACCAATCTCTCTGG

13714.1&2

GACAACATGAAATAAAATCCTAGAGGACAAATTAAGTCAATAGAGTGTAGTCTAGTTAA  
AAACTCGAAAAATGAGCAAGTCTGGTCCGAGTGGAGGAAGGGCTATACTATAAATCCAAG  
TGGCCCTCCTGATCTTAACAAGCCATGCTCATATACACATCTCTGAACTGGACATACCAC  
CTTACCGCAGGAAACAGGGCTTGGAACTTCTAAGGGAAATTAACATGCACCAACCCACATC  
TAACCTACCTGCCCCGGTAGGTACCATCCCTGCTTGGCTGAAATCAGTGCTC

13716.1&2

TGGGAATTAATAAAACCTGGAACAGGGAAGGTGAAAGTTGGAGTGAGATGTCTTCCATAT  
CTATACCTTTGTCCACAGTTGAATCCGAACTGTTTGGGTTTAGGGCATCTTAGAGTTGATT  
GATCGAAAAACAGACAGGAACCTGGTGGGAGGTCAAGTGGGGAAGTTGGTGAATGTGGA  
ATAACTTACCTTTGTGCTCCACTTAAACCAGATGTGTTGCAGCTTTCCTGACATGCAAGGA  
TCTACTTTAATTCCACACTCTCATTAATAAATTGAATAAAAGGGAATGTTTTGGCACCTGA  
TATAATCTGCCAGGCTATGTGACAGTAGGAAGGAATGGTTTCCCTAACAAAGCCCAATGC  
ACTGGTCTGACTTTATAAATTATTAATAAATGAACATAATC

FIG. 1K

000120 1089590

AAACTGGACCTTACAGGGACATGAATTTACTGCARGGTCTGCAAGCTCAGCCCTCT  
ACCTCAGGGCCCCACCCATGACTACCTCCCCAGGAGCGGGAGGGTGAAGGGGGCCTG  
TCTCTGCAAGTGGAGCCAGTGGAGGAATGAGCTCTGAAGACACAGCACCCAGCCTTCT  
CGCACCAGCCAAGCCTTAAGTGCCTGACCTGAACCAGAACCCAGCTGAACTGCCCC  
TCCAAGGGACAGGAAGGCTGGGGAGGGAGTTACAACCCAAGCCATTCCACCCCTCCC  
CTGCTGGGGAGAATGACACATCAAGCTGCTAACAAATTGGGGGAAGGGGAAGGAAGAAA  
CTCTGAAAACAAAATCTTGT

CATGCGTTTCACCACTGTTGGCCAGGCTGGTCTCGAACTCCTGGCCTCAAGCAATCCACCC  
GCCTCAGCCTCCAAAAGTGCTGGGATTACAGATGTGAGCCATGGCACCATGCCAAAAGGC  
TATATTCCTGGCTCTGTGTTCCGAGACTGCTTTTAATCCCAACTTCTCTACATTTAGATTA  
AAAAATATTTTATTCATGTTCAATCTGGAACATAATTACTGCATCTTAAGTTTCCACTGAT  
GTATATAGAAGGCTAAAGGCCAACATTTTATCAAATCTAGTAGAGTAACCAAACATAAAA  
TCAITTAATTACTTTCAACTTAATAACTAATTGACATTCCTCAAAAGAGCTGTTTTCAATCCT  
GATAGGTTCTTTATTTTTTCAAATATAATTGGCATGGGATGCTAATTTGCAATAAGGGCG  
ATAATGAGAATACCCCAAACCTGGA

GTTCGACCCCCAGGGAACTCGAAAGACACTTCTTGGCCGAGCTGTGGCGGGAGAAGCTGAT  
GTTCTTTTTTATTATGCTTCTGCATCCGAATTTGATGAGATGTTTGTGGGTGTGGGAGCCAG  
CCGTATCAGAAATCTTTTACCGAAGCAAAAGCCGAATGCTCCTTGTGTTATATTTATTGAT  
GAATTAGATTCTGTTTGGTCCGAAGCAATTGAATCTCCAATGCATCCATATTC AAGGCAGA  
CCATAAATCAACTTCTTGCTGAAATGGATGGTTTTAAACCCAATGAAGGAGTTATCATAAT  
AGGAGCCACAAACTTCCCAAGGCATTAGATAATGCCTTAATACCGTCTGGTGGTTTTGA  
CATGCAAGTTACAGTTCCAAGCCAGATGTAAGGTCGAACAGAAATTTGAAATGGTA  
TCTCAATAAAAAATAAGTTTGATCAATCCCGTTGATCCAGAAATTATAGCCTCGAGGTACTG  
GTGGCTTTTCCGAAGCAGAGTTGGGACAATCTT

GCCTACAACATCCAGAAAGAGTCTACCCCTGCACCTGGTCTCGTCTCAGAGGTGGGATGC  
AGATCTTCTGTGAAGACCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACA  
CCAFAGAGAACGTCAAAGCAAAGATCCARGACAAGGAAGGCRTYCCTCCTGACCAGCAGA  
GGTTGATCTTTGCCGGAAGCAGCTGCCAAGATGGDCCACCCCTGTCTGACTACAACATCC  
AGAAAGAGTCYACCCCTGCACCTGGTCTCGCTCTCAGAGGTGGGATGCARATCTTCTGTGA  
AGACCCCTGACTGGTAAGACCATCACCCCTCGAGGTGGAGCCCAAGTGACACCATCGAGAATG  
TCAAGGCCAAAGATCCAAGATAAGGAAGGCATCCCTCTGATCAGCAGAGGTTGATCTTTG  
CTGGGAAACAGCTGGAAGATGGACGCCACCCCTGTCTGACTACAACATCCAGAAAGAGTCCA  
CTCTGCACCTTGGTCTCTGCGCTTGAGGGGGGGTGTCTAAGTTTCCCCTTTAAGGTTTCMAC  
AAATTTCAATTGCACCTTCTCTTCAATAAAGTTGTTGCAATCCC

FIG. II

12

**066871-081000**

0953501-09100

13752.1

13732.2

FIG. 1M

0963601-031000

13735.2

13-36.1

13737.142

FIG. 1N

13738.1

TTTGACTTTAGTAGGGGCTGAACTATTTATTTTACTTTGCCMGTAATATTTARACCYTATA  
TATCTTTTCATTATGCCATCTTATCTTCTAATGBCAAGGGAACAGWTGCTAAMCTGGCTTCT  
GCATTWATCACATTAAAAATGGCTTTCTTGGAAAAATCTTCTTGATATGAATAAAGGATCTT  
TTAVAGCCATCATTTAAAGCMGGNTTCTCTCCAACAGAGTCTGCTASAGGGGGGKGAGCT  
GTGAACTCTGGCTGAAGGCTTCCCACACACTGCAATGACMTGGTTTCTGACCAGBGTG  
AGTETA

13738.2

AGAGAAGCCCCATAAATGCCAATCAGTGTGGGAAGGCCTTCAGTCAGAGCTCAAGCCTTTT  
CCTCCATCATCGGGTTCATACTGGAGAGAAACCTATGTATGTAATGAATGCCGCAGAGCC  
TTTGGTTTTAACTCTCATCTTACTGAACACGTAAGGATTACACAGGAGAAAAACCTATG  
TTTGTAAAGAGTGGCGGCAAGCCTTTCGTCCGAGTTCCACTCTTGTTCAGCATCGAAGAGT  
TCACACTGGGGAGAAAGCCCTACCAGTGGCTTGAATGTGGGAAAGCCTTCAGCCAGAGCTC  
CCAGCTCACCTACATCAGCCGAGTTCACACTGGAGAGAAAGCCTATGACTGTGGTGAAGT  
TGGGAAGGCCTTCAGCCGGAGGTCAACCTCATTACAGCATCAGAAAGTTCACAGCGGAGA  
GACTCGTAAGTGCAGAAAAATGGTCCAGCCTTTGTTCATGGCTCCAGCCTCACAGCAGAT  
GGACAGATTCCCCTGAGAGAAAGCAGGCGAGAACCTTTAACCATGGTGCAAAATCTCATT  
CTGCGCTGGACAGTTC

13739.1&2

GAGACAGGCTCTCACTTTGTCAACCCAGCCTGGAATGCAGTGGTGGGATCTTACGTAGCTCA  
CTGCAGCCCTGACCTCCTGGCACTCAAAACAATCTCCTGCCCTCAGCCTGCAAGTAGCTGGG  
ACTGTGGGTGCATGCCACCATGCCCTGCTAACTTTTGTAGTTTTGTAAAGATGGGCTTTT  
GCCATGTTCCACATCCTGGTCTTGAACCTGAGCTCAAACGATCTGCCACCTCGGCCTC  
CCAGAATGTTGGGATTACAGGGGTAAACCCACCCAGCCTGGCCCCATTAGGCTATTCTTAGC  
ATCCACTGTCTCACTGAGATTAATCATTAAGAGATGATAAGCACTGGAAGA.AAAAAAATTTT  
ACTAGCCTTTGGATATTTTT.CCTTTT.CAGCTTTATACAGAGGATTGGATCTTTAGTTTTT  
CTTTAACTGATAATAAAACATTGAAAGGAAATAAGTTACCTGAGATTACACAGAGATAAC  
CGGCATCACTCCCTTGGTCAAATCCAGTCTTACCACATCAATTAATTTTACAGAGGTGCAGGA  
TAAAGGCCTTTAGTCTGCTTTGGCACTTTTCTTCCACTTTTGTAAACCTGTGGCTGACA  
AATGGAATTGACAGCGTATGCCATGACTATCCATTTGTACGGCATACGCTGTCAATTTTT  
CCACCAATCCCTTGTCTCTCTTTGGAGAGATCTTCTTATCAGCTAGTCTTTGGCAAAAGTA  
ATTGCAACTTCTTCTAGGTATTCTATTGTCCCTTCCACTGCTGGA.ACCCTGGGACCAGGA  
CTAAAACCTCCAG

13741.1

ATCTCATATATATATTTCTTCTGACTTTATTTGCTTGGCTTCTGNCACCCATTTAAAAATATC  
ACAGAGACCAAAATAGAGCGGCTTTCTGGTGGAAAGGATGGCAGTCACAGGACAAAAATAC  
AAA.ACTAGCGGCTCTGTCTTCTCATACATACATAAATTTCAAGTATTTTTTTATGTACA  
AAGAGCTACTCTATCTGAAAAAAATTTAAAAAATAAATGAGACAAATAGTTTATGCATC  
CTAGGAAGAAAGAATGGGAAGAAAGAAAGGGGGCAGTTGGGTACACATTCTGTCCCTGT  
TCCCAGGGACCACTACCTTCTGCACTGAGTTCCGCCACAGCCTCACCCATCATGTACA  
GGGCAAGTGGCAGGATAGGTGGGGACCAAGTGGAGACACGAACCAGCAACATACTTTGGC  
CTGGAAGATAAGGAGAAAGTCTCAGAAACACACTGGTGGGAAGCAATCCACNCGCCGT  
GCCCCANGAGCTTCCACCTGCTGCTGCTGCTGGGTGGCTTTGGGAACAGCTTGGGCAG  
GCCCTTTTGGGTGGGNC.AACTGGCCCTTTGGGCCCTGTGGAAAG

FIG. 10

09636801.081000

096363010310000

14351.1

14351.2

14354.2

14354.1

CTTTCGATTTCCTTCAATTTCACCGTTTGATTATGAAGTTGTTCAAGGGCTAACTGCTG  
TGTATTACGCTTCTCTGAGTTCTTCACCTGATTGTTAAATGAATCCATTTCAGAGCT  
TAGATGCAGTTCTTTTCAAGAGCAGCTAAATGTTCTTAAAGTCTTGGCATAATTCTTCC  
TTTTCTGATGACTTTCTATGAAGTAAACTGATCCCTGAATCAGCTGTGTTACTGAGCTGCAT  
GTTTAAATTCTTTCGTTTAAATAGCTGCTTCTCAGGGACCAGATAGATAAGCTTATTTTGAT  
ATTCTTAAAGCTCTTGGTGAAGTGTTCGATTTCATAATTTCCAGGTCACACTGGTTATCC  
CAAACCTCT

FIG. 1P



16431.1.2

GTGGAGGTGAAACGGAGGCAAGAAAAGGGGGCTACCTCAGGAGCGAGGGACAAAGGGGGC  
GTGAGGCACCTAGGCCGCGGCACCCCGGCGACAGGAAGCCGTCTGAACCGGGCTACCGG  
GTAGGGGAAGGGCCCGCGTAGTCTCGCAGGGCCCCAGAGCTGGAGTCGGGTCCACAGCC  
CCGGGGCGTCGGCTTCTCACTTCTGGACCTCCCCGGCGCCCGGGCTGAGGACTGGCTCG  
GCGGAGGGAGAAGAGGAAACAGACTTGAGCAGCTCCCGTTGTCTCGCAACTCCACTGCC  
GAGGAATCTCATTTCTTCCCTCGTCTCTCACCCCCACCTCATGTAGAAAGGTGCTGAA  
GCGTCCGGAGGGGAAGAAGAACCTGGGCTACCGTCTGGCCTTCCCMCCCCCTTCCCGGGG  
CGCTTGGTGGGCGTGGAGTTGGGGTTGGGGGGGTGGGTGGGGGTTCTTTTGGAGTGCT  
GGGGAATTTTTTCCCTTCTTCAGGTACAGGGGAAAGGGAATGCCAATTCAGAGAGACAT  
GGGGGCAAGAAGGACGGGAGTGGAGGAGCTTCTGGAATTTGCAGCCGTATCGGGAGG  
CGGCAGCTCTAACAGCAGAGAGCGTCACCGCTTGGTATCGAAGCACAAGCGGCATAAGTC  
CAAACACTCCAAAGACATGGGGTTGGTGACCCCCGAAGCAGCATCCCTGGGCACAGTTAT  
CAAACCTTTGGTGGAGTATGATGATATCAGCTCTGATTCCGACACCTTCTCGATGACATG  
GCCTTCAAACCTAGACCGAAGGGAGAACGACGAACGTCTGGATCAGATCGGAGCGACCGC  
CTGCACAAACATCGTCACCACGACAGGCGTCCCGGGACTTACTAAAAGCTAAACAG  
ACCG

16432-1

GACATGTTTCCCTGCAGGGGACCAGAGACAAATGGGATTAGCCAGTGCTCACTGTTCTTTAT  
GCTTCCAGAGAGGATGGGGACAGCTCTCAGGTGAGAATCCAGGCTGAGAAGCCCATGCTG  
GTTGGGGGGCCCCCGGAAGCAGGCTCCCGATCCTCCCTGGCATCAGCGTAGACCCGCTGCTC  
AGGCTTGGGGTACCAAACCTCATGCTCTGACTGTTTGGCCCCATGCGGTGAGAGGAAAAC  
CTAGAAAAAGATTGCTCGTCTAAGGAATCAGCTGCCCCCTCATCTCCGCAATCCAAATGCT  
GGTGACAACATATTCCTCTCCAGGACACAGACTCGGTGACTCCACACTGGGCTGAGTGG  
CCTCTGGAGGCTCGTGGCCTAAGCCAGGGCTCCGTAAAGGCTGATCGGCTGAAGTGGGTGG  
GGTGAGGGTTTCTGACCCTTCCCTTCCCATCCCATAAACCGCTGTCAATGAGCTCACACTGT  
GGTCA

16432-2

GATGGCATGGTGGTCTCTAAATGCTCCCTGCTGGGATGGAGCACTTCTCCTGTGAGCCCAGG  
GGACCCGCTGTCCCTGGAGCTTGGGGCAAGGAGGGAAGAGTGATACCAGGAAGGTGGG  
GCTGCAGCCAGGGGCCAGAGTCAGTTCAGGAGTGGTCTCCTCGGCCCTCAAAGCTCCTCCG  
GGGACTGCTCAGGAGTGATGGTGGCCTGGAGTTTGGCCCAACTTCCCTGGCCACCTGGAA  
GGTGCCTGGCTGCTCCAGGCTCTAGGCTGGGCTGATGGGTTTCTCCAGGACACAAGTATC  
ATTAAAGCCACCTCTCCTCAGCTTGTACGGCCGACATGTGGGACAGGCTGTGCTCAAA  
CCCCCTCCCTGCCCCCTCCATCAGGAGGAGCCAGTGGAACTTCCGGAAGCTCCCA  
CATCTCAGGAGCCCTCAAAGTGGTCTGGGGCAAGCTCTGGTTCTCCTGACTGGAGGTCA  
TCTGGGCTTGGCCTGCTCTCTCCG

17184.3

TAAAAAAGTGTAACAAAGGTTTATTAGACTTCTTCATCCCCCAGATCCAGGATGTCTA  
TGTAACCGTTATCTTACAAAGAAAGCACAATATTGGTATAAACTAAGTCAGTGACTTGC  
TTAACTGAAATAGCGTCCATCCAAAGTGGGTTAAGGTAAACTACCTGACGATAATTGGC  
GGGATCCTGCAAGTTTGGACTGCTTCCCGGTTTGTCCAGGCTTCCGGGTCTGTTCTTGGC  
ACTCATGGGACAGGCATCCTGCTGCTGTGGGGCCCCGCTGGAGCCCTTACGTGAAGCT  
GAAGGTATCGACCTAGCGGGCTTACGGCACTGGGACCTTCATCCGGAACATAACAAGG  
TCGGGGAGAGCCCTCTTGGGCTATGTGGC

FIG. 1Q

17184.4

CAAGCGTTCCTTTATGGATGTAAATTCAAACAGTCATGCTGAGCCATCCCGGGCTGACAGT  
CACGTTWAAGACACTAGGTTCGGGCGCCACAGTGCCACCCAAGGAGAAGAAGAAATTTGGA  
ATTTTCCATGAAGATGTACGGAAATCTGATGTTGAATATGAAAATGGCCCCCAAATGGAA  
TTCCAAAAGGTTACCACAGGGGCTGTAAGACCTAGTGACCCTCCTAAGTGGGAAAGAGGA  
ATGGAGAATAGTATTTCTGATGCATCAAGAACATCAGAATATAAAACTGAGATCATAATG  
AAGGAAAATTCCATATCCAATATGAGTTTACTCAGAGACAGTAGAAACTATTCCCAGG

17185.1

TAGGAATAACAAATGTTTATTCAGAAATGGATAAGTAATACATAATCACCCCTTCATCTCTT  
AATGCCCCCTTCTCTCTTCTGACAGGAGACACAGATGGGTAAACATAGAGGCATGGGAA  
GTGGAGGAGGACACAGGACTAGCCCAACCTTCTCTTCCCGGTCTCCCAAGATGACTGCT  
TATAGAGTGGAGGAGGC.AAACAGGTCCCCTCAATGTACCAGATGGTCACCTATAGCACCA  
GCTCCAGATGGCCACGTGGTTGCCAGCTGGACTCAATGAACTCTGTGACAACCAAGAT  
ACCTGCTTTGGGATGAGAGGGAGGATAAAGCCATGCCAGGGAGGATATTTACCATCCCTAC  
CCTAAGC.ACAGTGCAAGCAGTGAGCCCCCGGCTCCAGTACCTGAAAAACCAAGGCCTAC  
TGNCTTTTGGATGCTCTCTTGGGCCACG

17183.2

AAGCCTCCTGCCCTGGAAATCTGGAGCCCTTGGAGCTGAGCTGGACGGGGCAGGGAGGG  
GCTGAGAGGCAAGACCGTCTCCTCTCTGCTGACCTGCTTCCCCAGCAGCCACTGCTGGGG  
ACAGCAGAAACCCACGACAGAAAAATGGGAGCCGAGAGTCTTAGCCCTGGAGCTGAGG  
CTGCTCTCGGGCTGACCCGCTGCTCTGCTGAGTGGCCAGAACTGGGGTTGGCATCTGGCATCC  
ATTTGAGGCCAGGGTGGACGAAAGGGAGCCCAACAGACGAAACCTATTCTGCTGTGAC  
AACACAGCCCTTGTCCCACGACGCTAAGTCCAGGGAGCGTGATGAAGTCAGGCAGCCAG  
TCGGGGAGGACGAGGTAAGTCAGCAGCAATGTACCTTGTAGCCTATGCGCTCAATGGCC  
CGGAGGGGCCAGCAACCCCCCGCACACCTCAGCCAAACAGCAGTGCCTCTGCAGGCACC.AAG  
AGAGCGATCATGGACTTGAGCCCCGTGTT

17190.1

GTTTGGCAGAAGACATGTTTAAATAACA.TTTCATATTTAAAAATACAGCAACAATTCTCT  
ATCTGTCCACCATCTTGCCCTTCCCTTCTGCGGCTGAGGCAGACAAAGGAAAGGTAATGA  
GGTTAGGGCCCCCAGGCGGCTAAGTGCTATTGGCCTGCTCTGCTCAAAGAGAGCCATA  
GCCAGCTGGGCACGGCCCCCTAGCCCTTCCAGCTTCTGAGGCGGCAGCGGTGGTAGAGT  
TCTTCACTGAGCCGTGGGCTCCAGTCTCAGCGGAGAACTTCTGCCACGACCTGCTCTA  
CGCCCEGA.AAGAGGTGGAGCCCTGAGAAACGGAGGAAAACATCCATCACCTCCAGCCCT  
CCAGGGCTTCTCTCTTCTGCGCTGCCATTCACCTGCCAGCCGGGCTCGGGCCGCCAG  
GTAGTCAGCGTTGTAGAAGCAGCCCTCCGCAAGGCTGCCGGTCAAATCTCCCCGCTATA  
GGAGCCCCCGGGAGGGGTCAGCAC

FIG. 1R

18

09635501 "081000

17190.2

CAAGTTGAACGTCAGGCTTGGCAGAGGTGGAGTGTAGATGAAAACAAAGGTGTGATTATG  
AAGAGGATGTGAGTCCTTTGGGTGTAGGAGAGAAAGGCTGTTGAGCTTCTATTTCAAGAT  
ACTTTTACCTGTGCAAAAAGCACATTTTCCACCTCCTTCTCATGGCATTGTGTAAAGGTGAG  
TATGATTCTATTCCATCTGCATTTTAGAGGTGAAGAATAACGTACAAGGGATTCAAGTAT  
TAGCAAGGGACCCCTCACTAAGTGTTGATGGAGTTAGGACAGAGCTCAGCTGTTTGAATCT  
CAGAGCCCAGGCAGCTGGAGCTGGGTAGGATCCTGGAGCTGGCACTAATGTGAGGTGCAT  
TCCCTCCAACCCAGGCTCAGATCCGGAACCTGACCGTGCTGACCCCCGAAGGGGAGGCAG  
GGCTGAGCTGGCCCGTTGGGCTCCCTGCTCCTTTACACCACACTCTCGCTTTGAGGTGCTG  
GGCTGGGACTACTTCACAGAGCAGC

17191.2&89.2

TGGCCTGGGCAGGATTGGGAGAGAGGTAGCTACCCGGATGCAGTCCTTTGGGATGAAGAC  
TATAGGGTATGACCCCATCATTTCCCCAGAGGTCTCGGCCTCCTTTGGTGTTCAGCAGCTG  
CCCCTGGAGGAGATCTGGCCTCTCTGTGATTTCACTGTGCACACTCCTCTCCTGCCCTC  
CAGGACAGGCTTGCTGAATGACAACACCTTTGCCCAAGTGAAGAAGGGGGTGGTGTGGT  
GAACTGTGCCCCTGGAGGGATCGTGGACGAAGGCGCCCTGCTCCGGGGCCCTGCAGTCTGG  
CCAGTGTGCCCCGGCTGCACTGGACGTGTTACGGAAGAGCCGCCACGGGACCGGGCCTT  
GGTGGACCATGAGAAATGTCATCAGCTGTCCCCACCTGGGTGCCAGCACCAAGGAGGCTCA  
GAGCCGCTGTGGGGAGGAAATTGCTGTTCAAGTTCGTGGACATGGTGAAGGGGAAATCTCT  
CACGGGGGTTGTGAATGCCCCAGGCCCTT

FIG. 1S

09636301.081000

AGCCAGATGGCTAGAGCTGCAAGAAGAAGTCAGGATCATGCTCAGTTTCCACAG  
CGATGAATGGGACCAAATATGTGGGCTATTACATCTGAACTGCTACTAAGCATGATA  
AACAGTTTGATACTCTCAAACCTTCAGGAGGTTACATAACAGGTGATCAAGCCCGTACTTT  
TTTCTACAGTCAGGTCTGCCGCCCCCGGTTTTAGCTGAAATATGGGCCCTTATCAGATCTG  
AACAAGGATGGGAAGATGGACCACCAAGAGTTCTCTATAGCTATGAAACTCATCAAGTTA  
AAGTTGCAGGGCCAAACAGCTGCCTGTAGTCTCCTCTCTATCATGAAACAACCCCTATGT  
TCTCTCCACTAATCTCTGCTCGTTTTGGGATGGGAAGCATGCCCAATCTGTCCATTATCAG  
CCATTGCCTCCAGTTGCACCTATAGCAACACCCTTGCTTTCTGCTACTTCAGGGACCAGTAT  
TCCTCCCTAATGATGCTGCTCCCTAGTGCCTTCTGTTAGTACATCCTCATTACCAAATG  
GAACTGCCAGTCTCATTACGCTTTATCCATTCTTTCTTCTTCAACATTGCCTCATGCCA  
TCATCTTACAGCCTGATGATGGGAGGATTTGGTGGTGTAGTATCCAGAAGGCCAGTCTC  
TGATTGATTTAGGATCTAGTAGCTCAACTTCTCAACTGCTTCCCTCTCAGGGAACCTCACCT  
AAGACAGGGACCTCAGAGTGGGCAGTTCTCAGCCTTCAAGATTAAAGTATCGGCAAAAA  
TTTAATAGTCTAGACAAAGGCATGAGCGGATACCTCTCAGGTTTTCAAGCTAGAAATGCCC  
TTCTTCAGTCAAATCTCTCTCAAACCTCAGCTAGCTACTATTTGGACTCTGGCTGACATCGAT  
GGTGACGGACAGTTGAAAGCTGAAGAAATTTATTCTGGCGATGCACCTCACTGACATGGCC  
AAAGCTGGACAGCCACTACCCTGACGTTGCTTCCCGAGCTTGTCCCTCCATCTTTTCAGAG  
GGGGAAGCAAGTTGATTCTGTTAATGGAAETCTGCCTTCATATCAGAAAACACAAGAAG  
AAGAGCCTCAGAAGAACTGCCAGTTACTTTTGAGGACAAACGGAAAGCCAACTATGAAC  
GAGGAAACATGGAGCTGGAGAAGCGACGCCAAGTGTGATGGAGCAGCAGCAGAGGGAG  
GCTGAACGCAAGGCCAGAAAGACAAGGAAGAGTGGGAGCGGAAACAGAGAGAAGTGC  
AAGAGCAAGAATGGAAGAAGCAGCTGGAGTTGGAGAAACGCTTGGAGAAACAGAGAGAG  
CTGGAGAGACAGCGGGAGGAAGACAGGAGAAAGGAGATAGAAAGACGAGAGGCAGCAA  
AACAGGAGCTTGAGAGACAACGCGCTTAGAATGGGAAAGACTCCGTCGGCAGGAGCTGC  
TCAGTCAGAAGACCAGCGAACAAGAACACATTGTCAGGCTGAGCTCCAGAAAGAAAAGT  
CTCCACCTGGAAGTGGAAAGCAGTGAATGGAAAACATCAGCAGATCTCAGGCAGACTACAA  
GATGTCCAAATCAGAAAGCAACACAAAAGACTGAGCTAGAAGTTTTGGATAAACAGTGT  
GACCTGGAAATATGGAATCAAAACACTTCAACAAGAGCTTAAGGAATATCAAAATAAG  
CTTATCTATCTGGTCCCTGAGAAGCAGCTATTAAACGAAAGAATTAATAACATGCAGCTCA  
GTAACACACCTGATTCAGGGAATCACTTACTTCATAAAAAGTCATCAGAAAAGGAAGAA  
TATGCCAAAAGACTTAAGAACAATAGATGCTCTGAAAAAGAACTGCACTCTAAGCTCT  
CAGAAATGGATTCAATTAACAATCAGCTGAAGGAAGTCAAGAAAAGCTATAATACACAGC  
AGTTAGCCCTTGAACAACCTTCATAAAATCAAAACGTCACAAATGGAAGGAAATCGAAAGAA  
AAAGATTAGAGCAAAAAA

FIG. 2A

ATGGCAGTGACACCATCATGGGAACCACCTTCCCTTTCTAGGATTCTCTGTAGTG  
GAAGAGAGCACCCAGTGTTGGGCTGAAAACATCTGAAAGTAGGGAGAAGAACCTAAAAAT  
AATCAGTATCTCAGAGGGCTCTAAGGTGCCAAGAAGTCTCACTGGACATTTAAGTGCCAA  
CAAAGGCATACTTTCGGAATCGCCAAGTCAAACTTTCTAACTTCTGTCTCTCAGAGAC  
AAGTGAGACTCAAGAGTCTACTGCTTTAGTGGCAACTACAGAAAACTGGTGTTACCCAGA  
AAAACAGGAGCAATTAGAAATGGTTCCAATATTTCAAAGCTCCGCAAACAGGATGTGCTT  
TCCTTTGCCCATTTAGGGTTTCTTCTTTCTTTCTTTCTTTATTAACCACTA

FIG. 2B

09636801.081000

ATATCTAGAACGGAGTGAGCAAAACAAGAGCAAGAAACAAGAAGCCAAAAGCAG  
AAGGCTCCAATATGAACAAGATAAATCTATCTTCAAAGACATATTAGAAGTTGGGAAAAT  
AATTCATGTGAACTAGACAAGTGTGTTAAGAGTGATAAGTAAAATGCACGTGGAGACAAG  
TGCATCCCCAGATCTCAGGGACCTCCCCCTGCCTGTACCTGGGGAGTGAGAGGACAGGAT  
AGTGCATGTTCTTTGTCTCTGAATTTTATGTTATATGTGCTGTAATGTTGCTCTGAGGAAGC  
CCCTGGAAAGTCTATCCCAACATATCCACATCTTATATCCACAAATTAAGCTGTAGTATG  
TACCCTAAGACGCTGCTAATTGACTGCCACTTCGCAACTCAGGGGCGGCTGCATTTTAGTA  
ATGGGTCAAATGATTCACTTTTATGATGCTTCCAAAGGTGCCTTGGCTTCTCTTCCCAACT  
GACAAATGCCAAAGTTGAGAAAAATGATCATAATTTTAGCATAAACAGAGCAGTCGGCGA  
CACCGATTTTATAAATAAACTGAGCACCTTCTTTTAAACAAACAAATGCGGGTTTATTCT  
CAGATGATGTTTCATCCGTGAATGGTCCAGGGAAGGACCTTTCACCTTGACTATATGGCATT  
ATGTCATCACAAGCTCTGAGGCTTCTCTTTCATCTGCGTGGACAGCTAAGACCTCAGT  
TTCAATAGCATCTAGAGCAGTGGGACTCAGCTGGGGTGATTTGCCCCCATCTCCGGGG  
GAATGTCTGAAGACAATTTTGTACCTCAATGAGGGAGTGGAGGAGGATACAGTGCTACT  
ACCAACTAGTGGATAAAGGCCAGGGATGCTGCTCAACCTCTACCATGTACAGGACGTCTC  
CCCATTACAACCTACCCAATCCGAAGTGTCAACTGTGTGAGGACTAAGAAACCTGGTTTTG  
AGTAGAAAAGGGCCTGGAAAGAGGGGAGCĒAACAAATCTGTCTGCTTCTCACATTAGTC  
ATTGGCAAATAAGCATTCTGTCTCTTGGCTGCTGCCTCAGCACAGAGAGCCAGAACTCTA  
TCGGGCACCAGGATAACATCTCTCAGTGAACAGAGTTGACAAGGCCTATGGGAAATGCCT  
GATGGGATTATCTTCAGCTTGTGAGCTTCTAAGTTTCTTCCCTTCACTTACCCTGCAAG  
CCAAGTTCTGTAAAGAGAAATGCCTGAGTTCTAGCTCAGGTTTTCTTACTCTGAATTTAGATC  
TCCAGACCCTTCTGCCCACAATTCAAATTAAGGCAACAAACATATACCTTCCATGAAGCA  
CACACAGACTTTTGAAAGCAAGCACAACTGCTTGAATTGAGGCCTTGAGGAATGAAG  
CTTGAAGGAAAAGAACTTTGTTCCAGCCCCCTTCCCACTCTTCAATGTGTTAACCAC  
TGCCTTCTGGACCTTGGAGCCACGGTGAATGATTACATGTTGTTATAGAAAAGTATTTT  
AGAGTTCTGATCGTTCAGAGAAATGATTAATAATACATTTCCTA

FIG. 2C

Element Display										1" X	
Diff Exp	Probe 1	Exp	Probe 2	Ut H/V Image	Probe/Vell	Probe 1	S/I	A%	Probe 2	S/I	A%
1.7	304A Ovary T (mids)		272A Dendritic cells	42240000 (420)	421G0106 (C:11)	2303	13.7	50	1430	2.0	50
1.1	305A Ovary Tumor		S7 Ovary N	42220026 (420)	421G0106 (C:11)	355	2.7	54	382	1.0	54
1.0	261A Ovary Tumor		S10 Skeletal muscle N	42230021 (420)	421G0106 (C:11)	1290	6.9	51	707	1.9	51
1.3	264A Ovary Tumor		S2 Pancreas H	42200029 (420)	421G0106 (C:11)	0500	44.0	62	1100	2.3	62
1.2	306A		S40	42240005 (420)	421G0106 (C:11)	510	3.8	50	819	2.0	50
1.7	265A Ovary Tumor		C15 Heart N	42200024 (420)	421G0106 (C:11)	2305	14.0	53	409	2.2	53
1.4	S25 Ovary Tumor		C14 Bone Marrow N	42210019 (420)	421G0106 (C:11)	531	3.5	53	743	2.0	53
	303A		H	42200009 (420)	421G0106 (C:11)	1042	10.0	39	1071	2.0	39
1.9	S22 Ovary Tumor		C19 Kidney N	42200027 (420)	421G0106 (C:11)	453	3.3	68	857	3.2	68
1.2	9005 T-P		9405 S-P	42220002 (420)	421G0106 (C:11)	1002	12.2	57	504	2.3	57
1.5	202A Ovary Tumor		330A Lung Hidesline H	42200022 (420)	421G0106 (C:11)	1406	7.5	55	965	2.2	55
1.1	S115		C110	42200004 (420)	421G0106 (C:11)	509	3.4	51	573	2.0	51
1.1	208A Ovary Tumor		C112 Lung N	42200025 (420)	421G0106 (C:11)	700	4.5	54	651	2.1	54
2.1	201A Ovary Tumor		S6 Stomach N	42200021 (420)	421G0106 (C:11)	625	4.6	46	1335	3.0	46
1.0	S23 Ovary Tumor		S56 Spleen Cord N	42200020 (420)	421G0106 (C:11)	3096	22.2	50	502	2.2	50
1.0	205A		270A	42200006 (420)	421G0106 (C:11)	2251	14.7	46	1256	2.0	46
1.0	0134		P	42200001 (420)	421G0106 (C:11)	552	3.4	72	1028	2.3	72
1.6	305A Ovary T		S01 Fetal tissue	42200007 (420)	421G0106 (C:11)	8126	35.5	50	1449	2.0	50
1.5	263A Ovary Tumor		S73 Breast N	42210023 (420)	421G0106 (C:11)	439	3.2	61	1531	3.4	61
1.3	302A		C119	42200010 (420)	421G0106 (C:11)	387	3.2	50	1270	2.1	50
1.0	206A		S27	42250003 (420)	421G0106 (C:11)	4242	22.2	58	883	2.0	58

FIG. 3

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TCGAGCGGCCGCGGCAGGTCCTTCAGACTTGGACTGTGTCCTGCTGCCAGGCTTCCAG  
GGCTCCAACTTGCAGACGGCCTGTTGTGGGACAGTCTCTGTAATCGCGAAAGCAACCATG  
GAAGACCTGGGGGAAAACACCATGGTTTTATCCACCCTGAGATCTTTGAACAACTTCATCT  
CTCAGCGTGCGGAGGGAGGCTCTGGACTGGATATTTCTACCTCGGECGCGACCACGCT

FIG. 4



TAGCGYGGTCGCGCCGAGGYCTGCTTYTCTGTCCAGCCCAGGGCCTGTGGGGTCAGGGC  
GGTGGGTGCAGATGGCATCCACTCCGGTGGCTTCCCCATCTTTCTCTGGCCTGAGCAAGGT  
CAGCCTGCAGCCAGAGTACAGAGGGCCAACACTGGTGTTCTTGAACAAGGGCCTTAGCAG  
GCCCTGAAGGRCCCTCTCTGTAGTGTGAACTTCTGGAGCCAGGCCACATGTTCTCCTCAT  
ACCGCAGGYTAGYGATGGTGAAGTTGAGGGTGAAATAGTATTMANGRAGATGGCTGGCA  
RACCTGCCCCGGCGGCCGCTCSAAATCC

FIG. 5

AGCGTGGTCGCCGAGGTGTCCTTCAGGGTCTGCTTATGCCCTTGTTC AAGAACACCAG  
TGTCAGCTCTCTGTACTCTGGTTGCAGACTGACCTTGCTCAGGCCTGAGAAGGATGGGGCA  
GCCACCAGAGTGGATGCTGTCTGCACCCATCGTCCTGACCCCAAAAGCCCTGGACTGGACA  
GAGAGCGGCTGTACTGGAAGCTGAGCCAGCTGACCCACGGCATCACTGAGCTGGGCCCCT  
ACACCCTGGACAGGGACAGTCTCTATGTCAATGGTTTCACCCATCGGAGCTCTGTACCCAC  
CACCAGCACCGGGGTGGTCAGCGAGGAGCCATTCAACCTGCCCGGGCGGCCGCTCGA

FIG. 6

**A**

TTGGGGNTTTMC GGGCCGCCCGGGCAGGTACCGGGGTGGT EGAGGAGCCATTAC  
ACTGAACTTCAC CAACAACCTGCCGTATGAGGAGAACATG GCACCCCTGGCTCCAG  
GAAGTTCAACACCACGGAGAGGGTCCTTCAGGGCCTGCTCAGGTCCCTGTTCAAGAGCAC  
CAGTGTGGCCCTCTGTA CTCTGGCTGCAGACTGACTTTGCTCAGACTTGAGAAACATGGG  
GCAGCCACTGGAGTGGACGCCATCTGCACCTCCGCCTTGATCCCACTGGTCCTGGACTGG  
ACAGAGAGCGGCTATACTGGGAGCTGAGCCAGTCCTCTGGCGGNGACNCCNTT

**B**

AGCGTGGTCGCGGCCGAGGTCCAGTCCGAGCATGCTCTTTCTCCTGCCCACTGGCACAGTG  
AGGAAGATCTCTGCTGTCAGTGAGAAGGCTGTCATCCACTGAGATGGCAGTCAAAAGTGC  
ATTTAATACACCTAACGTATCGAACATCATAGCTTGGCCCAGGTTATCTCATATGTGCTCA  
GAACACTTACAATAGCCTGCAGACCTGCCCCGGCGGCCGCTCGA

000T80" T089E960

**FIG. 7A and 7B**

TGTGGTGTGAACTGGAGNCAGGGTGACCCATGTCCTCCACTGCAGGTGGTG  
ATGGTGAAGTTGTGAATGGTACCAGGAGAGGGCCAGCATAAATTGTSGRGCKG  
SMGMSSGAGGMWGGWGTYYCWGAGGTTTCYRARRTCCACTGTGGAGGTCCCAGGAGTGCT  
GGTGGTGGGCACAGAGSTCYGATGGGTGAAACCATTGACATAGAGACTGTTCTGTCCAG  
GGTGTAGGGGCCCAGCTCTTYRATGYCATTGGYCAGTTKGCTYAGCTCCCAGTACAGCCRC  
TCTCKGYGGMGWCCAGSGCTTTTGGGGTCAAGATGATGGATGCAGATGGCATCCACTCCA  
GTGGCTGCTCCATCCTTCTCGGACCTGAGAGAGGTCAGTCTGCAGCCAGAGTACAGAGGG  
CCAACACTGGTGTCTTTGAATA

FIG. 8

TCGAGCGGCCGCGCAGGTCAGGAAGCACATTGGTCTTAGA CACTGCCTCCTGGA  
TTCCACCTGTGCTGCGGACATCTCCAGGGAGTGCAGAAGGGAAGCAGGTCAAACCTGCTCA  
GATCAGTCAGACTGGCTGTTCTCAGTTCTCACCTGAGCAAGGTCAGTCTGCAGCCAGAGTA  
CAGAGGGCCAACACTGGTGTCTTGAACAAGGGCTTGAGCAGACCCTGCAGAACCCTCTTC  
CGTGGTGTGAACTTCCTGGAACCAGGGTGTTCATGTTTTTCCTCATAATGCAAGGTTG  
GTGATGG

FIG. 9

[illegible]

**FIG. 10**

**FIG. 11**

Gene Name	Bal Probe 1		P1	Probe 2		QEM ID	Probe1		Probe2	
	Exp Name	Probe Name		P2 Name	Value		Value	At%	Value	At%
42100182 (107)	116.7 426A Ovary T (unc)	415A Aorta N	422X0611	7706	462	46.3	75	75	46.3	75
42100182 (107)	110.7 205A Ovary T	270A Liver N	422Q0606	10171	950	61.2	41	41	61.2	41
42100182 (107)	119.9 185A Ovary T	S91 Fetal tissue	422S0607	14415	1459	62.1	48	48	62.1	48
42100182 (107)	118.8 523A Ovary Tumor	S86 Splinal Cord N	422J0628	7781	880	47.3	71	71	47.3	71
42100182 (107)	116.4 183A Ovary T (unc)	11 Colon N	422H0609	4807	748	27.6	47	47	27.6	47
42100182 (107)	115.1 261A Ovary Tumor	S71 Breast N	42210623	9815	1909	57.1	74	74	57.1	74
42100182 (107)	114.9 429A Ovary T (unc)	461A Ovary N	42210614	2601	543	20.3	61	61	20.3	61
42100182 (107)	113.5 261A Ovary Tumor	S72 Pancreas N	422H0629	7934	2274	18.8	71	71	18.8	71
42100182 (107)	112.8 261A Ovary Tumor	C14 Bone Marrow	42210619	480	1175	3.5	80	80	3.5	80
42100182 (107)	112.5 5115 Ovary T (unc)	S10 Skeletal muscle	42210621	8993	3245	34.6	69	69	34.6	69
42100182 (107)	112.3 9311 Ovary T (unc)	C110 Small intestine	42210601	1864	708	8.1	67	67	8.1	67
42100182 (107)	112.1 522 Ovary Tumor	P1 Skin N	422K0601	2552	1113	12.7	41	41	12.7	41
42100182 (107)	112.0 181A Ovary T (unc)	C19 Kidney N	422Q0627	186	889	3.2	69	69	3.2	69
42100182 (107)	111.7 182A Ovary T	77A Placental cells	42210606	1516	1567	18.7	55	55	18.7	55
42100182 (107)	111.6 262A Ovary Tumor	C119 Brain N	422Q0610	608	1350	4.2	60	60	4.2	60
42100182 (107)	111.5 262A Ovary T	C15 Brain N	422Q0614	2064	1080	13.6	67	67	13.6	67
42100182 (107)	111.3 262A Ovary Tumor	S27 Ovary N	422S0603	1580	847	7.0	58	58	7.0	58
42100182 (107)	111.2 262A Ovary T	14A Large Intestine	422A0622	2549	1651	13.2	71	71	13.2	71
42100182 (107)	111.1 288A Ovary Tumor	S10 THAPC (unc)	42210605	531	738	3.9	62	62	3.9	62
42100182 (107)	111.0 135A Ovary Tumor	C112 Lung N	422V0605	893	1120	5.3	66	66	5.3	66
42100182 (107)	110.9 4851 P Ovary T (unc)	S7 Ovary N	42220626	440	567	3.3	60	60	3.3	60
42100182 (107)	110.8 428A Ovary T (unc)	9185 S P Ovary T (unc)	422X0602	4488	3529	21.6	66	66	21.6	66
42100182 (107)	110.7 201A Ovary Tumor	243A Esophagus N	42210612	725	689	6.2	65	65	6.2	65
42100182 (107)	110.6 201A Ovary Tumor	S6 Stomach N	422W0620	1008	1018	7.4	62	62	7.4	62

FIG. 12



Gene Name	Bal Probe 1		Probe 2		QEM		Probe1		Probe2	
	Exp Name	P1	P2 Name	ID	Value	B/B	A%	Value	B/B	A%
421V00189 (001)	11.2 426A Ovary T (met)	11.2 426A Ovary T (met)	415A Aorta N	422X0611	8072	55.2	67	243	2.4	67
421V00189 (001)	11.7 523A Ovary Tumor	11.7 523A Ovary Tumor	536 Spinal Cord N	422X0628	7167	42.6	69	537	2.5	69
421V00189 (001)	12.6 439A Ovary T (met)	12.6 439A Ovary T (met)	461A Ovary N	422X0613	2850	21.7	64	227	3.5	64
421V00189 (001)	13.0 485A Ovary T	13.0 485A Ovary T	S91 Fetal Uterus	422X0607	11711	54.0	58	1469	2.2	58
421V00189 (001)	17.3 261A Ovary Tumor	17.3 261A Ovary Tumor	S71 Breast N	422X0623	6949	37.8	69	952	2.6	69
421V00189 (001)	5.8 525A Ovary Tumor	5.8 525A Ovary Tumor	C74 Bone Marrow	422X0619	208	2.1	44	1210	2.9	44
421V00189 (001)	15.0 205A Ovary T	15.0 205A Ovary T	270A Liver F	422X0606	8676	52.3	57	1747	2.6	57
421V00189 (001)	14.5 463A Ovary T (met)	14.5 463A Ovary T (met)	H Colon N	422X0609	3149	17.4	57	707	2.0	57
421V00189 (001)	14.4 261A Ovary Tumor	14.4 261A Ovary Tumor	S10 Skeletal muscle	422X0621	6312	29.1	77	1411	2.9	77
421V00189 (001)	14.2 261A Ovary Tumor	14.2 261A Ovary Tumor	S22 Pancreas F	422X0609	7612	38.4	79	1809	1.3	79
421V00189 (001)	1.2 482A Ovary T	1.2 482A Ovary T	C119 Heart F	422X0610	4068	3.4	60	1508	2.3	60
421V00189 (001)	1.9 0164 Ovary T (SCH)	1.9 0164 Ovary T (SCH)	P51a F	422X0601	2500	12.3	51	860	2.1	51
421V00189 (001)	12.5 5115 Ovary T (met)	12.5 5115 Ovary T (met)	C710 Small intestine	422X0601	1424	6.7	61	569	2.1	61
421V00189 (001)	1.4 265A Ovary Tumor	1.4 265A Ovary Tumor	C75 Heart F	422X0624	1742	11.8	70	723	2.8	70
421V00189 (001)	12.1 461A Ovary T (met)	12.1 461A Ovary T (met)	222A Esophageal cells	422X0608	1083	17.0	62	142	2.0	62
421V00189 (001)	1.9 266A Ovary T	1.9 266A Ovary T	S27 Ovary F	422X0603	1570	8.0	47	742	2.0	47
421V00189 (001)	1.9 486A Ovary T	1.9 486A Ovary T	S10 PTHrP Tactant	422X0605	367	2.6	41	580	2.0	41
421V00189 (001)	11.7 262A Ovary Tumor	11.7 262A Ovary Tumor	334A Large Intestine	422X0622	2097	11.2	86	1202	2.7	86
421V00189 (001)	1.3 415A Ovary Tumor	1.3 415A Ovary Tumor	S7 Ovary F	422X0626	373	2.9	47	470	2.0	47
421V00189 (001)	1.1 288A Ovary Tumor	1.1 288A Ovary Tumor	C712 Lung F	422X0625	969	5.6	72	1094	2.9	72
421V00189 (001)	1.1 201A Ovary Tumor	1.1 201A Ovary Tumor	S6 Stomach N	422X0620	750	5.6	62	672	2.4	62
421V00189 (001)	1.1 428A Ovary T (met)	1.1 428A Ovary T (met)	244A Esophagus F	422X0612	498	4.2	73	446	2.1	73
421V00189 (001)	1.0 9485 1 P Ovary T (2)	1.0 9485 1 P Ovary T (2)	9485 5 P Ovary T (2)	422X0602	3117	16.7	91	3174	8.2	91
421V00189 (001)	5.22 Ovary Tumor	5.22 Ovary Tumor	C719 Kidney N	422X0627	224	2.3	48	409	2.3	48

FIG. 13

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Gene Name	Bal Probe 1 Exp Name	P1	P2 Name	Probe 3 Name	GEM ID	Probe1 Value	Probe2 Value	Probe1		Probe2	
								B/B	A%	B/B	A%
421100187 (E11)	420.2 426A Ovary T (met)		415A Aorta N		422X0611	5441	270	36.3	50	2.3	50
421100187 (E11)	110.0 S2A Ovary Tumor		S26 Splenic Cord N		42200628	5018	533	27.1	56	2.1	56
421100187 (E11)	08.3 429A Ovary T (met)		361A Ovary F1		42210614	1252	150	10.1	58	2.5	58
421100187 (E11)	05.7 085A Ovary T		S21 Fetal tissue		422X0607	9507	1668	35.8	45	2.1	45
421100187 (E11)	04.4 205A Ovary T		200A Liver F1		42200606	5456	1245	31.4	50	2.0	50
421100187 (E11)	04.2 265A Ovary Tumor		CT5 Head F1		42200624	1834	438	11.9	48	2.0	48
421100187 (E11)	04.1 082A Ovary T		CT10 Heart F1		42200610	109	1259	2.6	48	2.0	48
421100187 (E11)	03.6 261A Ovary Tumor		S10 Skeletal muscle		42200621	1711	1036	17.7	55	2.3	55
421100187 (E11)	03.4 264A Ovary Tumor		S3A Heart F1		42210614	4161	1249	24.0	62	1.0	62
421100187 (E11)	03.3 511A Ovary T (met)		CT10 Small intestine		12200601	1565	627	8.8	47	2.1	47
421100187 (E11)	03.1 264A Ovary T (met)		S2 Pancreas F1		42200629	3455	1640	14.9	60	1.0	60
421100187 (E11)	03.1 081A Ovary T (met)		CT10 Endothelial cells		42200608	2667	1270	13.4	44	1.9	44
421100187 (E11)	03.1 522 Ovary Tumor		CT10 Endothelial cells		42200627	291	605	2.4	51	2.5	51
421100187 (E11)	03.1 086A Ovary T		S40 PHMC Cytical		42210605	480	687	3.2	47	2.0	47
421100187 (E11)	03.0 914 Ovary T (SCH)		CT50m F1		42200604	1622	984	7.9	44	2.2	44
421100187 (E11)	03.5 262A Ovary Tumor		14A Large Intestine		422A0622	1892	1245	10.1	50	2.6	50
421100187 (E11)	03.4 428A Ovary T (met)		CT12 Lung F1		422V0625	604	908	4.1	62	2.6	62
421100187 (E11)	03.3 05A Ovary Tumor		211A Esophagus F1		42210612	246	325	2.7	78	1.9	78
421100187 (E11)	03.2 201A Ovary Tumor		S7 Ovary F1		42200626	382	501	2.9	58	2.0	58
421100187 (E11)	03.0 0485 1 P Ovary Tumor		S6 Stomach N		422W0620	558	677	4.2	58	2.3	58
421100187 (E11)	03.0 0485 1 P Ovary T (S)		0485 S P Ovary T (S)		422X0602	2582	2493	15.1	57	6.3	57
421100187 (E11)	03.0 0485 1 P Ovary T (S)		11 Colon F1		42210609	2261	862	12.5	38	1.7	38
421100187 (E11)	03.0 0485 1 P Ovary T		S27 Ovary F1		42250603	1739	965	9.7	36	2.2	36
421100187 (E11)	03.0 0485 1 P Ovary Tumor		CT1 Bone Marrow		42210619	283	845	2.2	44	2.2	44

FIG. 14

11721-1

ACGGTTTCAATGGACACTTTTATTGTTTACTTAATGGATCATCAATTTTGTCTCACTACCTA  
 CAAATGGAATTTTCATCTTGTTCATGCTGAGTAGTGAAACAGTGACAAAGCTAATCATAA  
 TAACCTACATCAAAAGAGAACTAAGCTAACACTGCTCACTTTCTTTTAAACAGGCAAAATA  
 TAAATATATGCACTCTAXAATGCACAATGGTTTAGTCACTAAAAAATTCAAATGGGATCTT  
 GAAGAATGTATGCAAAATCCAGGGTGCAGTGAAGATGAGCTGAGATGCTGTGCAACTGTTT  
 AAGGGTTCCTGGCACTGCATCTTGGCCACTAGCTGAATCTTGACATGGAAGGTTTTAGC  
 TAAFGCCAAGTGGAGATGCAGAAAATGCTAAGTTGACTTAGGGGCTGTGCACAGGAACTA  
 AAAGGCAGGAAAGTACTAAATATTGCTGAGAGCATCCACCCAGGAAGGACTTTACCTTC  
 CAGGAGCTCCAAACTGGCACCCACCCAGTGCTCACATGGCTGACTTTATCTCCGTGTTT  
 CATTTGGCACAGCAAGTGGCAGTG

11721-2

AAGGCTGGTGGGTTTTTGATCCTGCTGGAGAACCTCCGCTTTCATGTGGAGGAAGAAGGG  
 AAGGGAAAAGATGCTTCTGGGAACAAGGTTAAAGCCGAGCCAGCCAAAAATAGAAGCTTTC  
 CGAGCTTCACTTTCCAAGCTAGGGGATGTCTATGTCAATGATGCTTTTGGCACTGCTCACA  
 GAGCCACAGCTCCATGGTAGGAGTCAATCTGCCACAGAAGGCTGGTGGGTTTTTGATGA  
 AGAAGGAGCTGAACACTTTGCAAAGGCTTGGAGAGCCAGAGCCAGCCCTTCTGGCCA  
 TCCTGGGCGGAGCTAAAGTTGCAGACAAGATCCAGCTCATCAATAATATGCTGGACAAAG  
 TCAATGAGATGATTATTGGTGGTGAATGGCTTTTACCTTCCTTAAGGTGCTCAACAACAT  
 GGAGATTGGCACTTCTCTGTTGATGAAGAGCGAGCCAAGATTGTCAAAGACCTAATGTCC  
 AAAGCTGACAAGAATGGTGTGAAGATTACCTTGCCTGTTGACTTTGTCACTGCTGACAAGT  
 TTGATGA

11724-1

TTTGTTCCTTACATTTTTCTAAAGAGTACTTAAATCAGTCAACTGGTCTTTGAGACTCTTA  
 AGTCTGATTCCAACCTAGCTAATTCATCTGAGAACTGTGGTATAGGTGGCGTGTCTCTTC  
 TAGCTGGGACAAAAGTCTTTGTTTTCCCTGTAGAGTATCAGACCTTCTGCTGAAGC  
 TGGACCTCTGTCTGGCCCTTGGACTCCCAATCTGCTTGTATGTTCAAGCCTGGAAATGTT  
 AATCTTTAATCTTCCATATGGAATGGACATCTGTCTAAGTTGATCCTTTAGAACACTGCAAT  
 TATCTCTTTGAGTCTAATTTCTCTCTCTTCTTTGAATCCCATCACTAAACTTCTCTCCC  
 ATTCTTAGCTTCACTATCACCTGTACAGATCATCTGGAGGGAAGACATGCTCTTAGTA  
 AAGGCTGCAAGCTGGGTACAGTACTGTCCAAGTTTTCTGAAAGTTGCTGAACCTTCTGT  
 CTTTCTTGTTCAAAGTAACCTGAATCTCTCCAATTGTCTCTTCCAAGTGGACTTTTTCTCTGC  
 GCAAAGCATCCAG

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TCATTCCCTGTGATGGCATCTCGAATGTGATGAGCAGCCACGAAGTTGTAGATTTCAATCA  
 ATCAAAGGATTACCAATGTGGTGAAGCTGTGAGGCAAGAGAAACAAGAAGTGTATGGCA  
 AGTTAAGAAGCACAGAGGCAACAAGACAGACAGAAAAGCAGTTGCAGGAAGCTGAG  
 CAAGAATGGAGCAATGAAGAAGATGAGAAAGTTTGCTAAATCTAAACAGCAGAA  
 AATCCTAGAGCTGGAAGAAGAGAATGACCCGCTTAGGGCAGAGGTGCACCCTGCAGGAG  
 ATACAGCTAAAGAGTGTATGGAACACTTCTTCTCAATGCCAGCATGAAGGAAGAAC  
 TTGAAGGGGTCAAAATGGAGTATGAAACCTTTCTAAGAAGTTTCAGTCTTTAATGTCTGA  
 GAAAGACTCTCTAAGTGAAGAGGTTCAAGATTTAAAGCATCAGATAGAAGGTAATGTATC  
 TAAACAAGCTAACCTAGAGCCACCGAGAAACAAGATAACCAAACGAATGTCACTGAAGA  
 GGAACACAGTCTATACCAGGT

FIG. 15A

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CAAGCTTTTTTTTTTTTTTAAAAAGTGTTAGCATTAAATGTTTTATTGTCACGCAGATGGCA  
ACTGGGTTTATGTCCTCATATTTTATATTTTGTAAATTAAAAAATTACAAGTTTTAAATA  
GCCAATGGCTGGTTATATTTTCAGAAACATGATTAGACTAATTCATTAATGGTGGCTTCA  
AGCTTTTCCTTATTGGCTCCAGAAAAATCACCCACCTTTGTCCCTTCTTAAAAAACTGGAA  
TGTTGGCATGCATTTGACTTCACACTCTGAAAGCAATCCTGACAGTCATCCACATCTACTT  
CAAGGAATATCACGTTGGAATACTTTTCAGAGAGGGAATGAAAGAAAGGCTTGATCATTT  
TGC, AAGGCCCCACACCACGTGGCTGAGAAGTCAACTACTACAAGTTTATCACCTGCAGCGTC  
CAAGGCTTCTGAAAAGCAGCTCTTGGCTGCGATCTGCTTCACCATCTTGGCTGCTGGAGTCT  
GACGAGCGGCTGTAAAGGATCCGATGGAAAATGGATCCAAAGCACCAAAACAGAGCTTCAAGA  
CTCGCTGCTTGGCTTGAAATCGGATCCGATATCGCCATGGCT

AAGTGTTAGCAATTAATGTTTTATGTCACGCAGATGGCAACTGGGTTTATGTCTTCATATTT  
TATATTTTTGTAATAAATAAAAAAATMCAAGTTTTAAATAGCCAATGGCTGGTTATATTTTC  
AGAAAACATGATTAGACTAATTCATTAATGOTGGCTTCAAGCTTTTCTTATTGGCTCCAG  
AAAAATCACCCACCTTTGTCCCTCTTAAAAAACTGGAATGTTGGCATGCAATTGACTTCA  
CACTCTGAAGCAACATCCTGACAGTCATCCACATCTACTTCAAGGAATATCAGTTGGAAT  
ACTTTTCAGAGACGGAAATGAAGAAGCGTTGATCATTTTGCAAGGCCACACCACGTGG  
CTGAGAAGTCAACTACTACAAAGTTATCACCTGCAGCGTCCAAGGCTTCTGTAAAAGCAGT  
CTTGCTCTCGATCTGCTTCAACCATCTTGGCTGCTGGAGTCTGACGAGCGGCTGTAAAGGACC  
GATCGAAATGGATCCAAAGCACCAACAGAGCTTCAAGACTCGCTGCTTGGCATGAATTC  
GGATCCGA

36

11723.1.40.19.19

TACAAACTTTATTGAAACGGCACACGGCGCACACACAAACACCCCTGTGGATAGGGAAAA  
GCACCTGGCCACAGGGTCCACTGAAACGGGGAGGGGATGGCAGCTTGTAATGTGGCTTTT  
GCCACAACCCCTTCTGACAGCGAAGGCCTTAGATTGAGGCCCCACCTCCCATGGTGATGG  
GGAGCTCAGAATGGGGTCCAGGGAGAATTTGGTTAGGGGGAGGTGCTAGGGAGGCATGA  
GCAGAGGGCACCCCTCCGAGTGGGGTCCCCAGGGCTGCAGAGTCTTCAGTACTGTCCCTCAC  
AGCAGCTGTCTCAAGGCTGGGTCCCTCAAAGGGGGCTCCAGCGCGGGGCTCCCTGCGC  
AAACACTTGGTACCCCTGGCTGCGCACCGGAAGCCAGCAGGACAGCAGTGGCGCCGATCA  
GCACAACAGACGCCCTGGCGGTAGGGACAGCAGGCCCCAGCCCTGTGCGTTGTCTCGGCAG  
CAGGCTGTTATCATGGCAGAAGTGTCTTCCACACTTCACGTCCTTCACACCCACGTG  
AXGGCTACXGGCCAGGAAG

11723.2.40.19.19

CCCGTGGGTGCCATCCACGGAGTTGTTACCTGATCTTTGGAAGCAGGATCGCCCGTCTGCA  
CTGCAGTGGAAAGCCCCGTGGGCAGCAGTGATGGCCATCCCCGATGCCACGGCCTCTGGG  
AAGGGGCAGCAACTGGAAGTCCCTGAGACGGTAAAGATGCAGGAGTGGCCGGCAGAGCA  
GTGGGCATCAACCTGGCAGGGGCCACCCAGATGCCTGCTCAGTGTGTGGGCCATTTGTCC  
AGAAGGGGACGGCAGCAGCTGTAGCTGGCTCCTCCGGGTCCAGGCAGCAGGCCACAGGG  
CAGAACTGACCATCTGGGCACCGCGTTCCAGCCACCAGCCCTGCTGTTAAGGCCACCCAGC  
TCACCAGGGTCCACATGGTCTGCTTGGCTCCGACTCCGCGGTCTTGGGCCCTGATGGTTC  
TACCTGCTGTGAGCTGCCCAGTGGGAAGTATGGCTGCTGCCAATGCCCAACGCCACCTGCT  
GCTCCGATCACCTGCACTGCTGCCCAAGACACTGTGTGTGACCTGATCCAGAGTAAGTGC  
CTCTCCAAGGAGAACC

11730-1

GAATCACCTTTCTGGTTTAGCTAGTACTTGTACAGAACAAATGAGGTTTCCACACCGGAG  
TCTCCCTGGGCTCTGTTTGGCTCTCGGTAAGGCAGGCCTACACCTTTCTCTCTCTATGG  
AGAGGGGAATATGCAATTAAGGTGAAGAGTCACCTTCCAAAAGTGAGAAAGGGATTGAT  
GCTGCTTCAGGACTGTGGAAATTTGGGAATGTTTACAAATGGTTGCTACAAAACAACAA  
AAAAGGTAATTACAAAATGTGTACATCACAACATGCTTTTAAAGACATTATGCAATTGTGC  
TCACATTCCTTAAATGTTTGTTCCTCAAGGTGCTCAGCCTCTAGCCAGCTGGATTCTCCGG  
GAAGAGGCAGAGACAGTTTGGGCAAAAAGACACAGGGAAGGAGGGGGTGGTGAAGGA  
GAAAGCAGCCTTCCAGTTAAAGATCAGCCCTCAGTTAAAGGTGAGCTTCCCGCAXGCTGGC  
CTCAXGCGGAGTCTGGGTGAGAGCGAGGAGCAGCAGCAGGGTGGGACTGGGGCGT

11730-2

AACCGGAGCGCGAGCAGTAGCTGGGTGGCCACCATGGCTGGGATCACCACCATCGAGGCG  
GTGAAGCGCAAGATCCAGGTTCTGCAGCAGCAGGCAGATGATGCAGAGGAGCGAGCTGA  
GCGCCTCCAGCGAGAGTTGAGGGAGAAAGCGGGGGGGGGAACAGGCTGAGGCTGAGG  
TGGCCTCCTTGAACCGTAGGATCCAGCTGGTTGAAGAAGAGCTGGACCGTGCTCAGGAGC  
GCCTGGCCACTGCCCTGCAAAAGCTGCAAGAAGCTGAAAAGCTGCTGATGAGAGTGAGA  
GAGGTATGAAGGTTATTGAAAACCGGCCCTTAAAAGATGAAGAAAAGATGGAAGTCCAG  
GAAATCCAACCTCAAAGAAGCTAAGCACATTCCAGAAGAGGCAGATAGGAAGTATGAAGA  
GGTGGCTCGTAAGTTGGTGATCATTCAGGAGACTTGGAAACGCACAGAGGAACGAGCTGA  
GCTGGCAGAGTCCCGTTGCCGAGAGATGGATGAGCAGATTAGACTGATGGACCAGAACCT  
GAAGTGTCTGAGTGC

FIG. 15C

11732.1contig

GAGAACTTGGCCTTTATTGTGGGCCCCAGGAGGGCACAAGGTCAGGAGGCCCAAGGGAGG  
GATCTGGTTTTCTGGATAGCCAGGTCATAGCATGGGTATCAGTAGGAATCCGCTGTAGCTG  
CACAGGCCTCACTTGCTGCACTTCCGGGGAGAACACCTGCCTGCATGGCGTTGATGACCT  
CGTGGTACACGACAGAGCCATTGGTGCAGTGCAAGGGCACGGCGCATGGGCTCCGTCTCG  
AGGGCAGGCAGCAGGAGCATTGCTCCTGCACATCCTCGATGTCAATGGAGTACACAGCTT  
TGCTGGCACACTTTCCCTGCCAGTAATGAATGTCCACTTCTCTTGGGACTTACAATCTCCC  
ACTTTGATGTACTGCACCTTGCTGTGATGTCTTTGCAATCAGGCTCCTCACATGTGTACA  
GCAGGTGCCTGGAAATTTTACGATTTTGCCTCCTTCAGCCAGACACTTGTGTTTCATCAAATG  
GTGGGCAGCCCGTGACCCTCTTCTCCAGATGTACTCTCCTCT

11732.2contig

GCCTGGACCTTGCCGGATCAGTGCCACACAOTGACTTGCTTGGCAAAATGGCCAGACCTTGC  
TGCAGAGTCATCGTGTCAATTGTGACCATGGACCCCGGCTTCATGTGCCAACAGCCAGTC  
TCCTGTTCCGGGTGGAGGAGACGTGTGGCTGCCGCTGGACCTGCCCTTGTGTGTGCACGGGC  
AGTTCCACTCGGCACATCGTCACCTTCGATGGGCAGAAATTTCAAGCTTACTGGTAGCTGCT  
CCTATGTATCTTTCAAAACAAGGAGCAGGACCTGGAAGTGCTCCTCCACAATGGGGCCTG  
CAGCCCCGGGGCAAAACAAGCCTGCATGAAGTCCATTGAGATTAAGCATGCTGGCGTCTC  
TGCTGACCTGCACAGTAACATGGAGATGGCAGTGGATGGGAGACTGGTCCTTGGCCCGTA  
CGTTGGTGAAAACATCGAAGTCACCATCTACGGCGCTATCATGTATGAAGTCAGGTTTACC  
CATCTTGGCCACATCCTCACATACAGCGCCXCAAAACAACGAGTT

11735-1-2

AGATCAACCTCTCTGCTCAGGAGGAATGCCCTTCTTGTCTTGGATCTTTGCTTTGACGTTT  
TCGATAGTRWCAJCTKKRYTSRAMSKMAAGKGYRATGRWMITTSYWGWRASYXTMWWM  
RSGRARAYTTGICAYCCCMCTCWAGCGSAGKACCARGTGCAAGGTGGACTCTTTCTG  
GATGTTGTAGTCAGACAGGGTGGCTTCATCTTCAGCTGTTTCCAGCAAAAGATCAACCTC  
TGCTGATCAGGAGGGATGCCCTTCTTATCTTGGATCTTTGCCCTTGACATTCTCGATGGTGTG  
ACTGGCCTCCACCTCGAGGGTGAATGGCTTACCAGTCAGCGTCTTCACGAAGATYTGCATC  
CCACCTCTGAGACGGAGCACCAGGTGCAGGCTRGACTCTTCTGGATGTTGTAGTCAGACA  
GGGTGCGYCCATCTTCCAGCTGCTTCCSAGCAAGATCAACCTCTGCTGGTCAAGGAGGRAT  
GCCTTCTTGTCTGATCTTTGCTTGAACRTTCTCRATGGTGTCACTCGGCTCCACTTCGA  
GAGTGATGGTCTTACCAGTCAGGCTCTTCACGAAGATCTGCATCCCACCTCTAA

11740.2.contig

AAGTCACAAACAGACAAAGATTATACCAGCTGCAAGCTATATTAGAAGCTGAACGAAGA  
GACAGAGGTGATGATTCTGAGATGATTGGAGACCTTCAAGCTCGAATTACATCTTTACAAG  
AGGAGGTGAAGCATCTCAAAACATAATCTCGAAAAAGTGCAAGGAGAAAGAAAAGAGGCT  
CAGACATGCTTAATCACTCAGAAAACGAAAAGAAATAATTTAGAGATACATTTAAACTAC  
AAACTTAAATCATTACAACAACGGTTAGAAACAAGAGGTAAATGAACACAAAGTAACCAA  
CCTCGTTAACTGACAAAACATCAATCTATTGAAGAGGCAAAAGTCTGTGGCAATGTGTGAG  
ATGGAAAAAAGCTGAAAGAAAGAGAAAGCTCGAGAGAAGGCTGAAAAATCGGGTTGT  
TCAGATTGAGAAAACAGTGTTCATGCTAGACGTTGATCTGAAGCAATCTCAGCAGAACT  
AGAACAATTGACTGGAATAAAGAAAGGATGGACGATGAAGTTAAGAATCTA

FIG. 15D

11765.2&64.2.contig

CGCCTCCACCATGTCCATCAGGGTGACCCAGAAGTCCTACAAGGTGTCCACCTCTGGCCCC  
CGGGCCTTCAGCAGCCGCTCCTACACGAGTGGGCGCGGTTCCCGCATCAGCTCCTCGAGCT  
TCTCCCGAGTGGGCAGCAGCAACTTTCCGGGTGGCCTGGGCGGCGGCTATGGTGGGGCCA  
GCGGCATGGGAGGCATCACCGCAGTTACGGTCAACCAGAGCCTGCTGAGCCCCCTTGTCCT  
GGAGGTGGACCCCAACATCCAGGCCGTGGCACCCAGGAGAAGGAGCAGATCAAGACCTT  
CAACAACAAGTTTGCCTCCTTCATAGACAAGGTACGGTTCCTGGAGCAGCAGAACAAGAT  
GCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGACGGCTCGAAGCAACATGGACA  
ACATGTTTCGAGAGCTACATCAACARCCTTAGCGCGCAGCTGGAGACTCTGGGCCAGGAGA  
AGCTGAAGCTGGAGGCGGAGCTTGGCAACATGCAGGGGCTGGTGGAGGACTTCAAGAAC  
AAGTATGAGGATGAGATCAATAAGCGTACAGAGATGGAGAACGAATTTGCTCTCATCAAG  
AAGGATGTGGATGAAGCTTACATGAACAAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTG  
ACCGACGAGATCAACTTCCTCAGGCAGCTGTATGAAGAGGAGATCCGGGAGCTGCAGTCC  
CAGATCTCGGACACATCTGTGGTCTGTCCATGGACAACAGCCGCTCCCTGGACATGGACA  
GCATCATTTGCTGAGGTCAAGGCACAGTACGAGGATATTGCCAACCCGAGCCGGCTGAGG  
CTGAGAGCATGTACCAGGTCAAGTATGAGGAGCTGCAGAGCCTGGCTGGGAAGCACGGGG  
ATGACCTGCGGCGCACAAAGACTGAGATCTCTGAGATGAACCCGGAACATCAGCCCGGCT  
XCAGGCTGAGATTGAGGGCCTCAAAGGCCAGAXGGCTTXCCTGGAXGXCCGCCAT

11767.2.contig

CCCGGAGCCAGCCAACGAGCCGAAAAATGGCAGACAATTTTCGCTCCATGATGCGTTATCT  
GGTCTGGAAACCCAAACCTCAAGGATGGCCTGGCGCATGGGGGAACCAGCCTGCTGGG  
GCAGGGGGCTACCCAGGGGCTTCTATCTGGGGCTACCCCGGCCAGGCACCCCAAGG  
GCTTATCCTGGACAGGCACCTCCAGCGGCTACCTGGAGCACCTGGAGCTTATCCCGGAG  
CACCTGCACCTGGAGTCTACCCAGGGCTACCCAGCGGCCCTGGGGCTACCCATCTTCTGG  
ACAGCCAAGTGCCACCGGAGCCTACCTGGCACTGGCCCCCTATGGCGCCCTGCTGGGCA  
CTGATTGTGCTTATAACCTGCTTGGCTGGGGAGTGGTGCCTCGCATGCTGATAACAA  
TTCTGGGCACGGGTGAAGCCCAATGCAACAGAAATGCTTTAGATTCCAAAGAGGGAATG  
ATGTTGCCCTTCACTTAAACCCAGGCTCAATGAGAACAACAGGAGAGTCAATTGGTTGCAA  
TACAAAGCTGGATAA

11768-1&2

GGGAATGCAACAACCTTTATTGAAGGAAAGTGCAATGAAATTTGTTGAAACCTTAAAAGG  
GGAAACTTAGACACCCCCCTCRA<sub>2</sub>CGMAGKACCARGTGCA<sub>2</sub>GTGGACTCTTTCTGGAT  
GTTGTAGTCAGACAGGOTRCGWCCATCTTCCAGCTGTTTYCCRGCAAGATCAACCTCTGC  
TGA<sub>2</sub>CAGGAGGRATGCCCTTCTTATCTTGGATCTTTGCCCTTGACATTCTCGATGGTGTCACT  
GGCCTCCACCTCGAGGGTGATGGTCTTACCAGTCAGGGTCTTCACGAAGATYTGCATCCCA  
CCTCTGAGACCGAGCACCAGGTGCAGGGTRGACTCTTTCTGGATGTTGTAGTCAGACAGG  
GTGCGYCCATCTTCCAGCTGCTTCCS<sub>2</sub>GCAAGATCAACCTCTGCTGGTCAGGAGGRATGC  
CTTCCTTGTCTYGGATCTTTCYTTGACRTTCTCAATGGTGTCACTCGGCTCCACTTCGAGA  
GTGATGGTCTTACCAGTCAGGGTCTTCACGAAGATCTGCATCCACCTCTAAGACGGAGCA  
CPAGGTGCAGGGTGGACTCTTCTGCA<sub>2</sub>TG<sub>2</sub>TTGTAGTCAGACAGGGTGGCTCCATCTTCCA  
GCTGTTTCCAGCAAGATCAACCT

FIG. 15E

000F80-10895960

AGGTTGATCTTTGCTGGGAAACAGCTGGAAGATGGACGCCACCTGTCTGACTACAAcCATC  
 CAGAAAGAGTCCACCCTGCACCTGGTCTCCGTCTTAGAGGTGGGATGCAGATCTTCGTGA  
 AGACCCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACACCATTGAGAAYG  
 TCAARGCAAAGATCCARGACAAGGAAGGCATYCCTCCTGACCAGCAGAGGTTGATCTTTG  
 CISGAAA<sub>g</sub>CAGCTGGAAGATGGRCGCACCCTGTCTGACTACAAACATCCAGAAAGAGTCYA  
 CCCTGCACCTGGTGTCTCCGTCTCAGAGGTGGGATGTCARATCTTCGTGAAGACCCTGACTGG  
 TAAGACCATCACCTCGAGGTGGAGCCCAGTGACACCATCGAGAATGTCAAGGCAAAGAT  
 CCAAGATAAGGAAGGCATCCCTCCTGATCAGCAGAGGTTGATCTTTGCTGGGAAACAGCT  
 GGAAGATGGACGCACCCTGTCTGACTACAAACATCCAGAAAGAGTCCACcTYTGCACYTGGT  
 MCTBCGcCTY<sub>3</sub>GAGGGKGGGRTG<sub>caaa</sub>TCTWMGTKW<sub>aga</sub>CaCtCaCTKKYAAGRYYaTCAMCMWt  
 gAKKTCgAKYSCASTKWC<sub>3</sub>CTWTCRAKAAMGTYRWWGCAW<sub>aga</sub>TCCMAGACAAGGAAGGC  
 ATTCCTCCTGACCAGCAGAGGTTGATCT

## 11769.1.contig

ATGGAGTCTCACTCTGTCTGACCAGGCTGGACCGCTGTGGTGCGATATCGGCTCACTGCAGT  
 CTCCACTTCCTGGGTTCAAGCGATCCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACTACAG  
 GCAGGGCTCACCATAATTTTGTATTTTAGTAGAGACATGGTTTCGCCATGTTGGCTGGG  
 CTGGTCTCGAACTCCTGACCTCAAGTCATCTGTCTGGCCTCCCAAGGTGTTGGGATTACA  
 GCGGAAAGCCAACGCTCCCGGCCAGGCAACAACTTTAGAATGAAGGAAATATGCAAAAAG  
 AACATCACATCAAGGATCAATTAATTACCATCTATTAATTACTATATGTGGGTAATTATGA  
 CTATTTCCCAAGCAATTCTACGTTGACTGCTTGAGAAGATGTTTGTCTGCATGGTGGAGAG  
 TGGAGAAGGGCCAGGATTCTTAGCTT

## 11769.2.contig

AGCGCGGTCTTCCGGCCGCGAGAAAGCTGAAGGTGATGTGGCCGCCCTCAACCGACGCATC  
 CAGCTCGTTGAGGAGGAGTTGGACAGGCTCAGGAACGACTGGCCACGGCCCTGCAGAAG  
 CTGGAGGAGGCAGAAAAAGCTGACAGATGAGAGTGAGAGAGGAATGAAGGTGATAGAAAA  
 CCGGCCCATCAAGGATGAGGACAAGATGGAGATTCAGGAGATGCAGCTCAAAGAGGCCA  
 ACCACATTGCGGAAGAGGCTGACCGCAAAATACGAGGAGGTAGCTCGTAAGCTGCTATCC  
 TGGAGGGTGAGCTGACAGAGCGCCAGAGGAGCGTGGGAGGTGTCTGAACTAAAAATGTGGT  
 GACCTGGAAGAAGAACTCAAGAATGTTACTAACAATCTGAAATCTCTGGAGGCTGCATCT  
 GAAAAAGTATTCTGAAAAAGGAGGACAAATATGAAGAAGAAATTAACCTTCTGTCTGACAAA  
 CTGAAAGAGGCTGAGACCCGCTGCTCAATTTGCCAGAGAGAACGGTTGCCAAAACCTGGAAAAG  
 ACAATTGATGACCTGGAAAGAGAAACTTGGCCAGC

## 11770.1.contig

GTGCACAGGTCCCAATTTATTGTAGAAAAATAATAATTACAGTGATGAATAGCTCTTCTT  
 AATTACAAAACAGAAACCACAAAGAAGCAAGAGGAAAAACCCAGGACTTCCAAGGGT  
 GAAGCTGTCCCTCCTCCCTGCCACCTCCAGGCTCAATTAGTGTCTTGGAAAGGGGCAGA  
 GGACTCAGAGGGGATCAGTCTCCAGGGGCCCTGGGCTGAAGCGCGTGAGGCAGAGAGTCC  
 TGAGGCCACAGAGCTGGGCAACCTGAGCGGCTCTCTGGCCCCCTCCCCCACCCTGCCCCA  
 AACCTGTTTACAGCACCTTCGGCCCTCCCTCTAAACCCGTCCATCCACTCTGCACTTCCCA  
 GGCAGGTGGGTGGGCCAGGCTCAGGCTACTCTGGGCGCGGGTTTCGGTGACCAAGGC  
 ACAGTCCCAGAGGTGATATCAAGGCT

FIG. 15F



11770.2.contig

GCAAGGAACTGGTCTGCTCACACTTGTGGCTTGGCGATCAGGACTGGCTTTATCTCCTGA  
CTCAGGTGCAAAGGTGCACTCTCGGAACGTTAAGTCCGTCGCCAGCGCTTGGAAATCCTAC  
GGCCCCACAGCCGGATCCCTCAGCCTTCCAGGTCTCAACTCCCGTGGACGCTGAACAA  
TGGCCTCCAATGGGGCTACAGGTAATGGGCATCGCGCTGGCCGCTCCTGGGCTGGCTGGCCGT  
CATGCTGTGCTGCGCGCTGCCATGTGGCGCGTGACGGCCTTCATCGGCAGCAACATTGTC  
ACCTCGCAGACCATCTGGGAGGGCCTATGGATGAACTGCGTGGTGCAGAGCACCGGCCAG  
ATGCAGTGCAAGGTGTACGACTCGCTGCTGGCACTGCCGAGGACCTGCAGGCGGCCCGC  
GCCCTCGTCATCATCA

11773.1.contig

TGCAAAAGGGACACAGGGGTTCAAAAATAAAAAATTTCTTCCCCCTCCCCAAACCTGTAC  
CCCAGCTCCCCGACCACAACCCCTTCTCTCCCGGGGAAAGCAAGAAGGAGCAGGTGTG  
GCATCTGCAGCTGGGAAGAGAGAGGCGGGAGGTGCCGAGCTCGGTGCTGGTCTCTTTC  
CAAATATAAATACXTGTGTCAGAACTGGAATACTCCAGCACCCACCACCCAAGCACTCT  
CCGTTTTCTGCCGGTGTGAGAGAGGGCGGGGGGAGGGGGCGCCAGGCACCGGCTGGCT  
GCGGTCTACTGCATCCGCTGGGTGTGACCCCGCGAGCCTCCTGCTGCTCATTGTAGAAGA  
GATGACACTCGGGGTCCCCCGGATGGTGGGGGCTCCCTGGATCAGCTTCCCGGTGTTGGG  
GTTACACACACCAGCACTCCCCAGCTGCCGTTGAGAGACATCTTGCACTGTTTGAGGTTG  
TACAGGCCATGCTTGTACAGTTG

11773.1.contig

GGGTTGGAGGGAAGTCTTTATTTCAAAAAGACACTTGTCAATATTCAGTATCAAAACA  
GTTGCACTATTGATTTCTCTTCTCCCAATCGGCCCCAAAGAGACCACATAAAAGGAGAGT  
ACATTTTAAGCCAATAAGCTGCAGGATGTACACCTAACAGACCTCCTAGAAACCTTACCAG  
AAAATGGGGAAGTGGTACGGGAAGCAACTTAAAGATCAACAACTGCCAGCCACGGA  
CTGCAGAGCCTGTACAGCCAGATGGCGTGGCCAGGGTGGCCACAAACCCAAAGCAAGTT  
TCAAAATAATATAAAATTTAAAGTTTGTACATAAGCTATTCAAGATTTCTCCAGCACT  
GACTGATACAAAGCACAAATGAGATGGCACTTCTAGAGACAGCAGCTTCAAACCCAGAAA  
AGGGTGATGAGATGAGTTTACATGGCTAAATCAGTGGCAAAAACACAGTCTTCTTTCTTT  
CTTTCTTTCAAGGAGGCAAGCAAGCAATTAAGTGGTACCTCAACATAAGGGGGACATGA  
TCCAATCTGTAAGCAGTTGTGAACGGG

11778-2&30-2

CAGGAACCGGAGCCCGAGCAGTAGCTGGGTGGCCACCATGGCTGGGATCACCACCATCGA  
GGCGGTGAAGCGCAAGATCCAGGTTCTGCACCAGCAGGAGATGATGCAGAGGACCGAG  
CTGAGCGCCTCCAGCGAGAAGTTGAGCGAGAAAGCGGGGGCGGGAACAGGCTGAGGCT  
GAGGTGGCCTCCTTGAACCGTAGGATCCAGCTGGTTGAAGAAGAGCTGGACCGTGTCTAG  
GAGCGCCTGGCCACTGCCCTGCAAAAGCTCGAAGAAGCTGAAAAAGCTGCTGATCAGAGT  
GAGAGAGGTATGAAGGTTATTGAAAACCGGGCCTTAAAGATGAAGAAAAGATGGAAGT  
CCAGGAAAATCCAATCAAGAAGCTAAGCACATTGCAGAAGAGGCGAGATAGGAAGTATG  
AAGAGGTGGCTCGTAAGTTGGTGCATTTGAAGGAGACTTGAACCGCACAGAGGAACGAG  
CTGAGCTGGCAGAGTCCCGTTGCCGAGAGATGGATGAGCAGATTAGACTGATGGACCAGA  
ACCTGAAGTGTCTGAGTGC

FIG. 15G

00636801.081000

11782.1.contig

ATCTACGTCATCAATCAGGCTGGAGACACCATGTTCAATCGAGCTAAGCTGCTCAATATTG  
GCTTTCAAGAGGCCTTGAAGGACTATGATTACAACCTGCTTTGTGTTCAAGTATGTGGACCT  
CATTCCGATGGACGACCGTAATGCCTACAGGTGTTTTTCGCAGCCACGGCACATTTCTGTT  
GCAATGGACAAGTTCCGGTTTAGCCTGCCATATGTTCAAGTATTTGGAGGTGTCTCTGCTCT  
CAGTAAACAACAGTTTCTTGCCATCAATGGATTCCCTAATAATTATTGGGGTTGGGGAGGA  
GAAGATGACGACATTTTTAACAGATTAGTTCATAAAGGCATGTCTATATCACGTCCAAATG  
CTGTAGTAGGGAGGTGTGCAATGATCCGGCATTCAAGAGACAAGAAAAATGAGCCCCAATC  
CTCAGAGGTTTGACCGGATCGCACATACAAAGGAAACGATGCGCTTCGATGGTTTGAAC  
CACTTACCTACAAGGTGTTGGATGTCAGAGATACCCGTTATATACCCAAATCAC

11782.2.contig

CTAGACCTCTAATTAAAAGGCCACAATCATGCTGGAGAATGAACAGTCTGACCCCGAGGGC  
CACAGCGAATTTTAGGGAAGGAGCCAAAGAGGTGAGAAGGGAAAGGAAGGAAGG  
AAGGAGAACAATAAGAACTGGAGACGTTGGGTGGGTGAGGGAGTGTGGTGGAGGCTCGG  
AGAGATGGTAAACAACCTGACTGCTATGAGTTTTCAACCCCATAGTCTAGGGCCATGAG  
GGCGTCAGTTCTTGGTGGCTGAGGGTCTTCCACCCAGCCCACCTGGGGGAGTGGAAGTGG  
GGAGTTCTGCCAGGTAAGCAGATGTTGTCTCCCAAGTTCTGACCCAGATGTCTGGCAGGA  
TAACGCTGACCTGTTCCCTCAACAAGGGACCTGAAAGTAATTTTGTCTTTAC

11783-1 & 2

CCGAATTCAAGCGTCAACGATCCCTCCCTTACCATCAAATCAATTGGCCACCAATGGTACT  
GAACCTACGAGTACACCGACTAC<sub>2</sub>GGCGGACTAATCTTCAACTCCTACATACTTCCCCCAT  
TATTCCTAGAACCAGGCGACCTGCGACTCCTTGACGTTGACAATCGAGTAGTACTCCCGAT  
TGAAGCCCCCATTCGTATAATAATTACATCAACAAGACGTTCTGCACTCATGAGCTGTCCCC  
ACATTAGGCTTAAAAACAGATGCCAATCCCGGACGTCTAAGCCAAACCACTTTACCGCTA  
CAGACCGGGGGTATACTACCGTCAATGCTCTGAATCTGTGGAGCAAAACCACAGTTTCAT  
GCCATCGTCTAGAAATTAATCCCGTAAAAATCTTTGAAATAGGGCCCCGTATTTACCCCTA  
TAGCACCCCTCTACCCCTCTAG

11786.1.contig

GCTCTTCACACTTTTATTGTTAAATCTCTTCACATGGCAGATACAGAGCTGTGCTCTTGAAG  
ACCACCACTGACCAGGAAATGCCACTTTTACAAAATCATCCCCCTTTTCATGATTGGAAC  
AGTTTTCCTGACCGTCTCGGAGCGTTGAAGGCTGACCAGCACATTTGCACATGCCAAAAA  
GGAGTGACCCCAAGGCCTCAACCACTTCCAGAGCTCACCATGGGCTGCAGGTGACTT  
GCCAGGTTTGGGGTTCGTGAGCTTTCTTCTGCTGCGGTGGGGAGGCCCTCAAGAACTGA  
GAGGCCGGGGTATGCTTCATGAGTGTAAACATTACGGGACAAAAGCGCATCATTAGGAT  
AAGCAACAGCCACAGCACTTCATGCTTGTGAGGGTTAGCTGTAGGAGCGGGTGAAAGGAT  
TCAGTTTATGAAAATTTAAAGCAAAACCGGTTTATGCTGGGTGGGAAACAGGAAAAC  
TGTGATGTGGCCAATGACCACCAATTTTCTGCCCATGTGAAGGTCCCCATGAAACC

FIG. 15H

11786.2.contig

CAAGCGCTTGGCGTTTGGACCCAGTTCAGTGAGGTTCTTGGGTTTTGTGCCTTTGGGGATTT  
TGGTTTGACCCAGGGGTCAAGCTTAGGAAGGTCTTCAGGAGGAGGCCGAGTTCCCTTCAG  
TACCACCCCTCTCTCCCCACTTTCCCTCTCCCGGCAACATCTCTGGGAATCAACAGCATATT  
GACACGTTGGAGCCGAGCCTGAACATGCCCTCGGCCCCAGCACATGGAAAACCCCTTC  
CTTGCTAAGGTGTCTGAGTTTCTGGCTCTTGAGGCAATTCAGACTTGAAAATTCTCATCAG  
TCCATTGCTCTTGAGTCTTTGCAGAGAACCTCAGATCAGGTGCACCTGGGAGAAAGACTTT  
GTCCCCACTTACAGATCTATCTCTCCCTTGGGAAGGGCAGGGAATGGGGACGGTGTATGG  
AGGGGAAGGGATCTCTCGGCCCTTCATTGCCACACTTGGTGGGACCATGAACATCTTTAG  
TGCTGAGCTTCTCAAATTACTGCAATAGGA

13691.1&2

AGCGTCAAATCAGAATGGAAAAGACTCAAATCCATCATCAACACCAAGATCAAAAAGGAC  
AAGRATCCTTCAAGAAACAGGAAAAAATCTCTAAACACCAAAAGGACCTAGTTCTGTAG  
AAGACATTAAAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTTCTTCCCAAAGTGG  
AAGCCAAATTCATCAATTATGTGAAGAAATGCTTCCGGATGACTGACCAAGAGGCTATTCA  
AGATCTCTGGCAGTGGAGGAAGTCTCTTAAAGAAAATAGTTTAAACAAATTTGTTAAAAAT  
TTCCGTCTTATTTCAATTTCTGTAAACAGTGATATCTGGCTGTCCTTTTTATAATGCAGAGT  
GAGAACTTCCCTACCGTGTTTGATAAAATGTTGTCCAGGTTCTATTGCCAAGAATGTGTTGT  
CCAAAATGCCCTGTTTAGTTTTAAAGATCGAACTCCACCTTTGCTTGGTTTTAAGTATGTA  
TGGAAATGTTATGATAGGACATAGTAGCCGGTGGTCAGACATGGAAATGGTGGGSMGAC  
AAAAATATACATGTGAAATAA

13692.1&2

TCCGAATTCCAAGCGAATTAAGGACAAACGATTCCTTTAGAGGATTACTTTTTCAATTC  
GGTTTTAGTAATCTAGGCTTTCCCTGTAAGCAATACACGATGGATTTTAAATACTGTTTG  
TGGAAATGTGTTTAAAGGATTTGATCTACAACCTTTGTATATTGATAGTATTTCTAACTTTC  
ATTTCTTTACTGTTTGCAGTTAATGTTCACTCTGCTATGCAATCGTTTATATGCACGTTTC  
TTTAAATTTTTTAGATTTTCTGGATGTATAGTTTAAACAACAAAAGTCTATTTAAAAGT  
TAGCAGTAGTTTACAGTTCTAGCAAAACAGGAAAGTTGTGGGGTTAAACTTTGTATTTCTT  
TCTTATAGAGGCTTCTAAAAGGTAATTTATATGTTCTTTTTAACAAATATTGTGTACAAC  
CTTTAAACATCAATGTTTGGATCAAAACAAGACCCAGCTTATTTTCTGC

13693.2

TGTGCTGGCCGCGCCCTGAGGTGGAGGCCAGGACTCTGACCCCTGCCCTTCAGCAA  
GGCCCCCGGCAGCGCCGCCACTACGAACCTCCGTGGGTGAAAAATATAGGCCAGTAAA  
GCTGAATGAAATTTGTGGGAATGAAGACACCGTGAGCAGGCTAGAGGTCTTTGCAAGGGA  
AGGAAATGTGCCCAACATCATCATTCGGGGCCCTCCAGGAACCGGCAAGACCACAAGCAT  
TCTGTGCTTGGCCCGGCCCTGCTGGGCCAGCACTCAAAGATGCCATGTTGGAACCTCAAT  
GCTTCAAATGACACGGGCCATTGACGTTGTGACGAATAAAATTTAAATGTTTGTCAACAA  
AAAGTCACTCTTCCCAAAGCCCGACATAAGATCATCATCTGATGAAGCAGACAGCATG  
ACCGACGGAGCCGAGCAAGCCTTGAGGAGAACCATGGAAATCTACTCTAAAACCACTCGT  
TCGCCCTTGTGTAATGCTTCGGATAAGATCATCGAGCC

FIG. 15I

13696.1-13744.1

CTTTGCAAAGCTTTTATTTTCATGTCTGCGGCATGGAATCCACCTGCACATGGCATCTTAGCT  
GTGAAGGAGAAAGCAGTCCACGAGAAGGAATGAGTGGGCGGAACCAACGGCCTCCACAA  
GCTGCCTTCCAGCAGCCTGCCAAGGCCATGGCAGAGAGAGACTGCAAACAAACACAAGCA  
AACAGAGTCTCTTCACAGCTGGAGTCTGAAAGCTCATAGTGGCATGTGTGAATCTGACAA  
AATTAAGGTGTGCATAGTCCATTACATGCATAAAACACTAATAATCCTGTTTACACG  
TGACTGCAGCAGGCAGGTCCAGCTCCACCCTGCCCCCTGCCCACATCACATCAAGTGCCA  
TGGTTTAGAGGGTTTTTTCATATGTAAATCTTTTATTCTGTAAAAGGTAACAAAATATACAG  
AACAAAACCTTCCCTTTTTTAAACTAATGTTACAAATCTGTATTATCACTTGGATATAAAT  
AGTATATAAGCTGATC

13700.1

CAAGGGATATATGTTGAGGGTACRGRGTGA<sup>5</sup>ACTGAACAGATCACAAAGCAGAGAAACA  
TTAGTTCTCTCCCTCCCCAGCGTCTCTTCGTCTCCCTGGTTTTCCGATGTCCACAGAGTGA  
GATTGTCCCTAAGTAACTGCATGATCAGAGTGTGKCTTTATAAGACTCTTCATTACAGGT  
ATCCAATTCAGCAATTGCTTCATCAAATGCCGTTTTTGGCAGGCTACAGGCCTTTTCAGGA  
GAGTTTAGAATCTCATAGTAAAGACTGAGAAATTTAGTGCCAGACCAAGACGAATTGGG  
TGTGTAGGCTGCATTNCTTTCTTACTAAATTTCAAATGCTTCTGGTAAGCCTGCTGGGAGTT  
CGACACAAGTGGTTTTGTTTGTCTCCAGATGCCACTTCAGAAAGATACCTAAAATAATCT  
CCTTTCATTTTCAAAGTAGAACAC

13700.2

TCCGGAGCCGGGGTACTCGCCCGCGCGCGCGGGTGCAGCCACTGCAGGCACCGCTGCC  
GCGGCCTGAGTAGTGGGCTTAGGAAGGAAGAGGTCACTCGCTCGGAGCTTCGCTCGGAA  
GGGTCTTTGTTCCCTGCCAGCCCTCCCAAGGGAATGACAATGGATAAAAGTGAGCTGGTACA  
GAAAGCCAAACTCGCTGAGCAGGCTGAGCGATATGATGATATGGCTGCAGCCATGAAGGC  
AGTCACAGAACAGGGGCAATGAATCTCCAAAGCAAGAGAGAAATCTGCTCTCTGTTGCCTA  
CAAGAATGTGTTAAGGCGCGCGCGGCTTCTTCCGCGGTGTCACTCCAGCATTGAGCAGA  
AAACAGAGAGCAATGAGAAGAAGCAGCAGATGGCCAAAGAGTACCGTGAGAAGATAGA  
GGCAGAACTCCAGGACATCTCCAAATGATGTTCTGGAGCTTGTGGACAAATATCTTATTCC  
AATGCTACACAACCCAGAAA

13701.1

AAAAAGCAGCARGTTCAACACAAAATAGAAATCTCAAATGTAGGATAGAAACAAACCAA  
GTGTGTGAGCGGGGAAGCAACAGCAAAAGGAAGCAATGAGATGTTGCAAAAAAGATGGA  
GGAGGGTTCCCTCTCCTCTCGGGACTGACTCAAACACTGATGTGGCAGTATACACCATTC  
CAGAGTCAGGGGTGTTCAATCTTTTGGGACTAAGAAAAGGTGGGGATTAGAAGACGT  
TTCTGGAGGCTTAGGGACCAAGCCCTGGTCTCTTCCCCCTCCCAACCCCTTGATCCCTTT  
CTCTGATCAGCGGAAAGGAGCTCGAATGAGGACGTAGAGTTGGAAAGGGAAGGATTG  
CACTTGACAGAATGGGACAGACTCCTTCCCA

FIG. 15J

13701.2

TGGCAATAGCACAGCCATCCAGGAGCTCTTCARGCGCATCTCGGAGCAGTTCACTGCCATG  
TTCCGCCGGAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTC  
ACCGAGGCTGAGAGCAACATGAACGACCTCGTCTCTGAGTATCAAGCAGTACCAGGATGC  
CACCGCAGAAGAGGAGGAGGATTTCCGTGAGGAGGCCGAAGAGGAGGCCTAAGGCAGAG  
CCCCATCACCTCAGGCTTCTCAGTCCCTTAGCCGTCTTACTCAACTGCCCTTTCTCTCC  
CTCAGAATTTGTGTTTGTGCTGCCTCTATCTGTTTTTGTCTTCTTCTGGGGGGGTCTAGAA  
CAGTGCTGGCACATAGTAGGCGCTCAATAAATACTTGTTGNTGAATGTCTCCT

13702.2

AGCTGGCGCTAGGGCTCGGTTGTGAAATACAGCGTRGTCAGCCCTTGCGCTCAGTGTAGAA  
ACCCACGCCTGTAAGGTCCGTCTTCGTCCATCTGCTTTTTTCTGAAATACACTAAGAGCAG  
CCACAAAAGTGAACCTCAAGGAAACCATAAAGCTTGGAGTGCCTTAATTTTTAACCAGTT  
TCCAATAAAACGGTTTACTACCT

13704.2-13740.2

GGAGATGAAGATGAGGAAGCTGAGTCAGCTACGGGCARGCGGGCAGCTGAAGATGATGA  
GGATGACGATGTCGATACCAAGAAGCAGAAGACCGACGAGGATGACTAGACAGCAAAAA  
AGGAAAAGTTAAA

13706.1

GATGAAAATTAAATACTTAAATTAATCAAAAAGGCACTACGATACCACCTAAAACCTACTG  
CCTCAGTGGCAGTAKGCTAAKGAACATCAAGCTACAGSACATYATCTAATATGAATGTTA  
GCAATTACATAKARGAAGCATGTTTCCCTTCCAGAAGACTATGGNACAATGGTCAATTWG  
GGCCCAAGAGGATATTTGGCCNCGAAAGCATCAAGATAGATNAANGTAAAG

13706.2

GAGTAGCAACGCAAAAGCGCTTGGTATTGAGTCTGTGGGSGACTTCGGTTCGGGTCTCTGCA  
GCAGCCGTGATCGCTTAGTGGAGTGCTTAGGGTAGTTGGCCAGGATGCCGAATATCAAAA  
TCTTCAGCAGGCAGTCCCACCGACTTATCTCASAATAATTGCTGACCGCCTGGGCCTGG  
AGCTAGGCAAGGTGGTGACTAAGAAATTCAGCAACCAGGAGACCTGTGTGGAAATTGGTG  
AAAGTGTACCGTGGAGAGGATGTCTACATTGTTACAGAGTGGNTGTGGCGAAATCAATGAC  
AATTTAATGGAGCTTTTGATCATGATTAATGCCTGCAAGATTGCTTCAGCCAGCCGGGTTA  
CTGCAGTCATCCCATGCTTCCCTTATGCCCCGGCAGGATAAGAAAAGATNAGAGCCGGGCC  
GCCAATCTCAGCCAAGCTTGGTGCAAAATATGCTATCTGTAGCAGTGCAGATCATATTATCA  
CGATGGACCTACATGCTTCTCAAAATTCANGGCTTTT

FIG. 15K

13707.3

ATGCAAAAAGGGGACACAGGGGGTTCAAAAATAAAAAATTTCTTCCCCCTCCCCAAACCT  
GTACCCAGCTCCCCGACCAC.AACCCCTTCTCCCCGGGAAAGCAAGAAGGAGCAGG  
TGTGGCATCTGCAGCTGGGAAGAGAGACGCCGGGGAGGTGCCGAGCTCGGTGCTGGTCTC  
TTTCCAAATATAAAATACGTGTGTGCAAACTGGAAAATCCTCCAGCACCCACCACCCAAGCA  
CTCTCCGTTTTCTGCCGGTGTGTTGGAGAGGGGGCGNGGGCAGGGGGCGCCAGGCACCGGT  
GGCTGCGGTCTACTGCATCCGCTGGGTGTGCACCCCGCGA

13710.2

AGGTTGGAGAAGGTCATGCAGGTGCAGATTGTCCAGGSKCAGCCACAGGGTCAAGCCCAA  
CAGGCCCAGAGTGGCACTGGACAGACCATGCAGGTGATGCAGCAGATCATCTAACACA  
GGAGAGATCCAGCAGATCCCCGTGCAGCTGAATGCCGGCCAGCTGCAGTATATCCGCTTA  
GCCCAGCCTGTATCAGGCACTCAAGTTGTGCAGGGACAGATCCAGACACTTGGCCACCAAT  
GCTCAACAGATTACACAGACAGAGGTCCAGCAAGGACAGCAGCAGTTCAAGCCAGTTTAC  
AAGATGGACAGCAGCTCTACCAGATCCAGCAAGTCACCATGCCCTGCCGGGCCANGACCTCG  
CCAGCCCATGTTTATCCAGTCAAGCCAACCAGCCCTTCNACGGGCAGGCCCCCAGGTGAC  
CGGCGACTGAAGGGCCTGACCTGGCAAGGCCAANGACACCCAACAC.AATTTTTGCCATAC  
AGCCCCCAGGCAATGGGCAACACCTTTCTTCCCAGAGGAC

13710-1

TGAGATTTATTCCATTTTCATGCCAGCTTGAAGTCCATGCCAAGGGRGACTAGCACAGTTTTTA  
ATGCATTTAAAAAATAAAACGGAGGTGGGCAGCAAAACACACAAAGTCTAGTTTCTGGG  
TCCCTGGGAGAAAAGAGTGTGGCAATCAATCCACCCACTCTCCACAGGAATAAAATCTGT  
CTCTTAAATGCAAGAATGTTTCCATGCCCTCTGGATGCCAAATACACAGAGCTCTGGGGTC  
AGAGCAAGGGATGGGAGAGGACCACGAGTGA.AAAAAGCAGCTACACACATTCACCTAAT  
TCCATCTGAGGGCAAGCAACAGTGGCAAGTCTTGGGGTAGCAGCTGT

13711.1

TCCAGACATGCTCCTGTCTAGGGGGGACCAGGAACCAGACCTGCTATGGGAAGCAGAA  
AGAGTTAAGCGAAAGGTTTTCTTTCAATCCTGTTCCTTCTCTTTTGCTTTTGAACAGTTTTTA  
AATACTAATAGCTAAGTCAATTCGCCAGCCAGGTCCCGGTGAACAGTAGAGAACAAGGA  
GCTTGCTAAGAAATTAATTTTCTGT.TTTTACCCCAATCAACAGACCTGCCCTGTTCCCTG  
ATGGAGTTCCATTCCTGCCAGGGCAGGGCTGAGTAACAGGAAGCCATTCAAGAAAGCCGG  
GTGTGAATCACTGCCACCCCATGGACAGACCCCTCACTTCTCTTAGCCGCAGCGCT  
ACTTAATAAATATAATTAATCTTGAATATGATAACCGAATTTTCCATGCCGGCATCCTA  
AGGGCACTTGCCAGCTCTTA.TCCGGACACTCAAGCACTGTGTGTGGACAACAGATAAAGG  
AAAAGAAAAAGAAAGAAAAC.AACCGCAACTTCTGT

FIG. 15L

13711.2

TGAGACGGACCACTGGCCTGGTCCCCCTCATKTGCTGTCGTAGGACCTGACATGAAACGC  
AGATCTAGTGGCAGAGAGGAAGATGAGGAACCTTCTGAGACGTGGCAGCTTCAAGAA  
GAGCAATTAATGAAGCTTAAGCTCAGGCCTGGGACAGTTGATCTTGAAAGAAGAGATGGAG  
AAAGAGAGCCGGGAAAGGTATCTCTGTTAGCCAGTGGCTACGATTCTCCCATCAACTCAG  
CTTCACATATCCATCATCTAAAAGTGCATCTCTCCCTGGCTATGGAAGAAATGGGCTTCA  
CCGGCCTGTTTCTACCGACTTCGCTCAGTATAACAGCTATGGGGATGTCAGCGGGGGAGTG  
CGAGATTACCAGACACTTCCAGATGGCCACATGCCCTGCAATGAGAATGGACCGAGGAGTG  
TCTATGCCCCAACATGTTGGAACCAAAGATATTTCCATATGAAATGCTCATGGTGACCAACA  
GAGGGCCGAAACCAAATCTCAGAGAGGTGGACAGAA

13713.1&2

TCACCTTATTTTTCTTGTATAAAAAACCCTATGTTGTAGCCACAGCTGGAGCCTGAGTCCGCT  
GCACGGAGACTCTGGTGTGGGTCTTGACGAGGTGGTCAGTGAACCTCTGATAGGGAGACT  
TGGTGAATACAGTCTCCTTCCAGAGGTGGGGGGTCAGGTAGCTGTAGGTCTTAGAAATGGC  
ATCAAAGGTGGCCTTGGCGAAGTTGCCACGGGTGGCAGTGCAGCCCCGGGTGAGGTGTA  
GCAGTCATCGATACCAGCCATCATGAG

13715.4

CTGGAATATAGACCCGTGATCGACAAAACCTTGAACGAGGGCTGACTGTGCCACCGTCCCGC  
CAGCCATTGCTCCTACTGATGAGACAAGATGTGGTGATGACAGAATCAGCTTTGTAAAT  
ATGTATAATACCTCATGCCATGTGTCCATGTCACTGCTTTCATACCGTTCTGCACTCTGG  
GGAAGAAGGAGTACATTGAACGGAGATTGGCACCTAGTGGCTGGGAGCTTGGCAGGAACC  
CAGTGGCCAGGGAGCGTGGCACTTACCTTGTCCCTTGTCTTCACTTGTGTGAGATGATAAA  
ACTGGGCACAGCTCTTAAATAAAATATAAATGAACA

13717.1&2

TGAATGGGGACGAGCTGACCCAGGAAATGGACCTTGNCGAGACCAGGCCTGCAGGGGAT  
GGAACCTTCCAGAAGTGGGCACTGTGCTGGTGGCTCTTGGGAAGGAGCAGAAGTACACA  
TGCCATGTGGAACATGAGGGGCTGGCTGAGCCCCCTCACCTGAGATGGGGCAAGGAGGAG  
CCTCCTTCATCCACCAAGACTAACACAGTAATCAATTGCTGTTCCGGTTGTCTTGGAGCTGT  
GGTCATCCTTGGAGCTGTGATGGCTTTGTGATGAAGAGGAGGAGAAACACAGGTGGAAA  
AGGAGGGGACTATGCTCTGGCTCCAGGCTCCAGAGCTCTGATATGTCTCTCCAGATTGT  
AAAGTGTGAAGACAGCTGCTGGTGGTGGACTTGGTGACAGACAATGTCTTACACATCTCC  
TGTGACATCCAGAGACCTCAGTCTCTTACTCAAGTGTCTGATGTTCCCTGTGAGTCTCGG  
GGCTCAAAGTGAAGAAGTGTGGAGGCCAGTCCACCCCTGCCACACCAGGACCCTATCCCTG  
CACTGCCCTGTGTTCCCTTCCACAGCCAACTTGTCTGCTCCAGCCAAACATTGGTGGACAT  
CTGCAGCCTGTGAGCTCCATGCTACCCCTGACCTTCAACTCCTCACTTCCACACTGAGAATA  
ATAATTTGAATGTGGGTGGCTGGAGAGATGGCTCAGCGCTGACTGCTCTTCCAAAGGTCT  
GAGTTCAAATCCCAGCAACCACATGGTGGCTCACAAACCATCTGTAATGGGATCTAATACCC  
TCTTCTGACGTGTGTAAGACASCTACAGTGTACTTACATATAATAATAAATAAG

FIG. 15M

09636801-081000

GGCCGGGCGCGCGCGCCCCGCCACACGCACGCCGGGCGTGCCAGTTTATAAAGGGAGAG  
AGCAAGCAGCGAGTCTTGAAGCTCTGTTTGGTGCTTTGGATCCATTTCCATCGGTCTTAC  
AGCCGCTCGTCAGACTCCAGCAGCCAAGATGGTGAAGCAGATCGAGAGCAAGACTGCTTT  
TCAGGAAGCCTTGGACGCTGCAGGTGATAAACTTGTAGTAGTTGACTTCTCAGCCAGTGG  
TGTGGGCTTGC AAAATGATCAAGCCTTTCTTTCATTCCCTCTCTGAAAAGTATTCCAACGT  
GATATTCTTGAAGTAGATGTGGATGACTGTCAGGATGTTGCTTCAGAGTGTGAAGTCAAA  
TGCATGCCAACATTCCAGTTTTTAAAGAAGGGACAAAAGGTGGGTGAATTTTCTGGAGCCA  
ATAAGGAAAAGCTTGAAGCCACCATTAATGAATTAGTCTAATCATGTTTTCTGAAAATATA  
ACCAGCCATTGGCTATTTAAAACTTGTAATTTTTTAAATTTACAAAAATATAAAATATGAA  
GACATAAACCCMGTTCGCATCTGCGTGACAAATAAACATTAATGCTAACACTT

## 13721.1

TCACATAAGAAATTTAAGCAAGTTACRCTATCTTAAAAAACACAACGAATGCATTTTAATA  
GAGAAACCTTCCCTCCCTCCACCTCCCTCCCCACCCTCCTCATGAATTAAGAATCTAAG  
AGAAGAAGTAACCATAAAACCAAGTTTGTGGAATCCATCATCCAGAGTGCTTACATGGT  
GATTAGGTTAATAATGCTTCTTACAAAATTTCTATTTTAAAAAAATTATAACCTTGATTG  
CTTATTACAAAAAAATTCAGTACAAAAGTTCAATATATTGAAAAATGCTTTTCCCTCCCT  
CACAGCACCGTTTTATATATAGCAGAGAATAATGAAGAGATTGCTAGTCTAGATGGGGCA  
ATCTTCAAATTACACCAAGACGCACAGTGGTTATTTACCCTCCCTTCTCAT.AAG

## 13721.2

GGAAAGGATTCAAGAATTAGACGACTGCTTGCTRRAGAAAAAGACAACCTCTCGTCCAT  
GCTGACAGACAAAGAGAGAGAGATGCGCGAAATAAGGGATCAATGCAGCAACAGCTGA  
ATGACTATGAACAGCTTCTTGATGTAAAGTTAGCCCTGGACATGGAAATCAGTGCTTACAG  
GAAACTCTTAGAAGGCCAAGCAAGAGAGCTTGAAGCTGTCTCCAAAGCCCTTCTCCCGTGT  
GACAGTATCCCGAGCATCCTCAAGTCTGTAGTGTACCGTACAACCTAGAGGAAAGCGGAAGA  
GGGTTGATGTGGAAGAATCAGACCGCAAGTAGTGTAGTGTAGCATCTCTCATTCGGCTCAA  
CCACTGGAAATGTTTGCATCGAAGAAATGATGTTGATGGGAAATTTATCCCGCTTGAAGA  
ACACTTCTGAACAGGATCAACCAATGGGAAGCGCTTGGGAGATGATCAGAAAAATTGGAGA  
CACATCAGTCAGTTATAAAATATACCTCAA

## 13723.1

CATGGCTTTCACCAGGTTGCCAGGCTGCTCTTGAACSTCTGACCTCAGGTGATCCACCCG  
CCTCGGCCTCCCAAAGTCTGCGGATTACAGGCGTGAGCCACCACGCGCGGCCCCCAAAGC  
TGTTTCTTTTGTCTTATGCGTAAAGCTCTCTGCGCATGCAGTATCTACATAACTGACGTGAC  
TGCCAGCAAGCTCAGTCACTCCGTGCTCTTTCTCTTCCAGTTCTTCTCTCTCTTCAAG  
TTCTGCCTCAGTGAAGCTGCAAGGTCCCCAGTTAAGTGATCAGGTGAGGGTTCTTCAACC  
TGGTCTATCAGTCGAATTAATCCTTCATGATGG

FIG. 15N



13723.2

GATGTGTTGGACCCTCTGTGTC.AAAAAAACCTCACAAAGAATCCCCTGCTCATTACAGAA  
GAAGATGCATTTAAAAATATGGGTTATTTTCAACTTTTTATCTGAGGACAAGTATCCATTAA  
TTATTGTGT.CAGAAGAGATTGAATACCTGCTTAAGAAGCTTACAGAAGCTATGGGAGGAG  
GTTGGCAGCAAGAACAATTTGAACATTATAAAATCAACTTTGATGACAGTAAAAATGGCC  
TTTCTGCATGGGAACCTTATTGAGCTTATTGGAAATGGACAGTTTAGCAAAGGCATGGACCG  
GCAGACTGTGTCTATGGCAATTAATGAAGTCTTTAATGAAGTTATATTAGATGTGTTAAAG  
CAGGGTTACATGATGAAAAAGGCCACAGACGGAAAACTGGACTGAAAGATGGTTTGTA  
CTAAAACCCAACATAATTTCTTACTATGTGAGTGAGGATCTGAAGGATAAGAAAGGAGAC  
ATTCTCTTGGATGAAAAATTGCTGTGT.AGAAGTCCTTGCCCTGACAAAAGATGGAAAGAAAT  
GCCTTTT

13725.1

GACTGGTTCTTTATTTCAAAAAGACACTTGT.AAATATTCAGTRTCAAAACAGTTGCACTATT  
GATTTCTCTTTCTCCCAATCGGCCCAAAGAGACCACATAAAAGGAGAGTACATTTTAAGC  
CAATAAGCTGCAGGATGTACACCTAACAGACCTCCTAGAAACCTTACCAGAAAAATGGGGA  
CTGGGTAGGGAAGGAAACTTAAAGATCAACAAACTGCCAGCCACGGACTGCAGAGGCT  
GTCACAGCCAGATGGGGTGGCCAGGGTGGCCACAAACCCAAAGCAAGTTTCAAAATAATA  
TAAATTTAAAAAGTTTGTACATAAGCTATTCAAGATTTCTCCAGCACTGACTGATACAA  
AGCACAATTGAGATGGCACTTCTAGAGACAGCAGCTTCAAAACCCAGAAAAAGGGTGATGAG  
ATGAAGTTTCACATGGCTAAATCAGTGGCAAAAAACACAGTCTTCTTTCTTTCTTTTCAA  
GGANGCAGGAAAGCAATTAAGTGGTCACTTAACATAAGGGGGAC

13725.2

TGGGTGGCCACCATGGCTGGGATCACCACCATGGAGGGGGTGAAGCCCAAGATCCAGGTT  
CTGCAGCAGCAGGCAGATGATGCAGAGGAGCGAGCTGAGCGCCTCCAGCGAGAAGTTGA  
GGGAGAAAGCCGGGCGGGGGAACAGGCTGAGGCTGAGGTTGCCCTCCTTGAACCGTAGGA  
TCCAGCTGCTTGAAGAAGAGCTGGACCGTGGCTCAGGAGCGCCTGGCCACTGCCCTGCCAA  
AGCTGGAAGAAGCTGAAAAAGCTGCTGATGAGAGTGAGAGAGGTATGAAGGTTATTGAA  
AACC GGCCCTTAAAGATCAAGAAAAAGATGCAACTCCAGGAATCCA.ACTCAAAGAAGC  
TAAGCACATTGCAGAAAGAGCCAGATAGCAAGTATGAAGAGGTGGCTCGTAAGTTGGTGTAT  
CATGAAAGGAGACTTGGAAACCGGCACAGAACCAACGACCTTGAGCTTGGC.AAAAGTCCCGT  
TGCCACAGATGGGATGAACCAGATTAGACTGATGGACCANAACC

13726.1&2

AGGGGCGNCGGGTGGCTGGGCGCACTGGGTGACCGACTTAGCCTGGCCAGACTCTCAGCAC  
CTGGAAGCGCCCGAGAGTGACAGCGTGAGGCTGGGAGGGAGGACTTGGCTTGAGCTTGT  
TAAACTCTGCTCTGAGGCTCCTTGTGGCTGCATTTAGATGGCTCCCGCAAAGAAGGGTGG  
CGAGAAGAAAAAGGGCGGCTTGTGCCATCAACGAAGTGGTAACCCGAGAATACACCATCAA  
CA.TTCACAAGCGCATCCATGGAGTGGCTTCAAGAAGCGTGCACCTCGGGCACTCAAAGA  
GATTCGGAAATTTGCCATGAAGGAGATGGGA.ACTCCAGATGTGCGCATTGACACCAGGCT  
CAACAAAGCTGTCTGGGCCAAAGCAATTAAGCAATGTGCCATACCGAATCCGGTGTGGGGC  
TGTCCAGAAAACGTAAATGACCATGAAGATTCACCAAAATAAGCTATATACTTTGGTTACCTA  
TGTACCTGTACCACTTTCAAAAAATCTACAGACAGTCAATGTGGATGAGAACTAATCGCTG  
ATCGTCAGATCAAAATAAAGTTATAAAAT

FIG. 150

00636801.001000

13727.1

TCGGGAGCCACACTTGGCCCTCTTCTCTCCAAAGSGCCAGAACCTCCTTCTCTTTGGAGAA  
TGGGGAGGCCTCTTGGAGACACAGAGGGTTTCACCTTGGATGACCTCTAGAGAAATTGCC  
CAAGAAGCCCACCTTCTGGTCCCAACCTGCAGACCCACAGCAGTCAGTTGGTCAGGCCCT  
GCTGTAGAAGGTCACTTGGCTCCATTGCCTGCTTCCAACCAATGGGCAGGAGAGAAGGCC  
TTTATTTCTCGCCACCCATTCTCTGTACCAGCACCTCCGTTTTAGTCAGTGTTGTCCA  
GCAACGGTACCGTTTACACAGTCACCTCAGACACACCATTTACCTCCCTTGCCAAGCTGT  
TAGCCTTAGAGTGATTGCACTGAACACTGTTTACACACCGTGAATCCATTCCCATCAGTCC  
ATTCCAGTTGGCACCAGCCTGAACCATTTGGTACCTGGTGTAACTGGAGTCCTGTTTACA  
AGGTGGAGTCGGGGCTTGCTGACTTCTCTTCAATTTGAGGGCAC

13727.2

ACCTAGACAGAAGGTGGGTGAGGGAGGACTGGTAGGAGGCTGAGGCAATTCCTTGGTAGT  
TTGTCTGAAACCTACTGGAGAAGTCAGCATGAGGCACCTACTGAGAGAAGTGCCGAGA  
AACTGCTGACTGCATCTGTTAAGAGTTAAGAGTAAAGAGGTAGAAGTGTTTCTGAATCA  
GAGTGGAAAGCGTCTCAAGGGTCCCAAGTGGAGGTCCCTGAGCTACCTCCCTTCCGTGAGT  
GGGAAGAGTGAAGCCCATGAAGAAGTGAAGCAAGGATGGGGTTCTGGGCTCCA  
GGCAAGGGCTGTGCTCTCTGCAAGCAGGGAGCCCGAGTCAGAAGAAAAGAACTAATCA  
TTGTGTGCAAGAAACCTTGCCCGGATACTAGCGGAAAAGTGGAGGCGGNGGTGGGGGCAC  
AGGAAAGTGGAAGTGATTGATGAGAGGAGAGAAAGCCTATGCACAGTGGCCGAGTCCAC  
TTGTAAGTG

13728.1&2

TTCAAGCAATTGTAAACAAGTATATGTAGATTAGAGTGAGCAAAATCATATACAATTTTCAT  
TTCCAGTTGCTATTTTCCAAATTTGTTCTGTAAATGTCTGTTAAAATTACTTAAAAATTAACAAA  
GCCAAAAATTAATTTATGACAAGAAAGCCATCCCTACATTAATCTTACTTTTCCACTCAC  
CGGCCCCATCTCTCTCTCTTTTCTTAAGTATGCCATTAAAAGTGTCTACTGGGGCCGGGGC  
TGTGGCTCATGGCTGTAAATCCACCAATTTGGCAGGCCAAGGCAGGCGGATCATGAGGTC  
AAGAGATTGAGACCATCTCTGGCCAAATGCTGAAACCCCGCTCGACTAAGAATACAAAA  
ATTAGCTCGGCATGGTGGCCCATGCTGTAGTCTCAGCTACTCGGGAGGCTGAGGCAGAA  
GAATCGCTTGAACCCGGGAGGCAGAGGATGCAAGTGAAGCCCCGATCGCGCCACTGCACTCT  
AGCCTGGCGGACAGACTGAGACTCTGCTC

13731.1&2

TGTGCCAGTCTACAGCCCTATCAGCAGCGACTCCTTCAGCAACAGATGGGGTCCCTGTTT  
AGCCCAACCCCATGAGCCCCCAGCAGCATATGCTCCCAATCAGGCCAGTCCCCACACCT  
ACAAGGCCAGCAGATCCCTAATTTCTCTCTCCAATCAAGTGCGCTCTCCCCAGCCTGTCCCTT  
CTCCACGCCACAGTCCCAGCCCCCCCCACTCCAGTCTCTCCCCAAGGATGCAGCCTCAGCC  
TTCTCCACACCACGTTTCCCCACAGACAAGTTCCCCACATCTGGACTGGTAGTTGCCAG  
GQCAACCCCATGGAACAAGGGCATTTTCCAGCC

FIG. 15P

13736.2

13-44.2-13696.2

13746.1&2-13720.1&2

FIG. 150

14347.1

CAGATTTTATTTCAGTCGTCAGTGGGCGGTTTCTTGCTGCTTATTTGTCTGCTAGCCTG  
CTCTTCCAGCTGCCATGGCCAGGCGCAAGGCCTTGATGACATCTCGCAGGGCTGAGAAATGC  
TTGGCTTGCTGGGCCAGAGCAGATTCCGCTTTGTTTACAAAGGTCTCCAGGTCAATGCTG  
GCTGCTCGGTCACTCTCAGAGAGCTCAAGCCAGTCTGGTCTTGGCTGTATGATCTCTTGGAG  
CTCTTCCATAGCCTTCTCTCCAGCTCCCTGATCTGAGTCAATGGCTTCGTTAAAGCTGGACA  
TCTGGGAAGACAGTTCCTCTCTCTTGGATAAAATTGCCTGGAATCAGCGCCCCGTTAGA  
GCAGGCTTCCATCTCTTCTGTTTCCAATTTGAATCAACTGCTCTCCACTGGGCCCCACTGTGGG  
GGCTCAGCTCCTTGACCCTGCTGCATATCTTAAGGGGTGTTTAAAGGATATTCACAGGAGCT  
TATGCCTGGT

14347.2

CTCCTCTTGGTACATGAACCCAAGTTGAAAGTGGACTTAACAAAGTATCTGGAGAACCAA  
GCATTCGCTTTGACTTTGCATTTGATGAAACAGCTTCGAATGAAGTTGTCTACAGGTTTAC  
AGCAAGGCCACTGGTACAGACAATCTTTGAAGGTGGAAAAGCAACTTGTITTTGCATATGG  
CCAGACAGGAAGTGGCAAGACACATACTATGGGCGGAGACCTCTCTGGGAAAGCCCCAGAA  
TGCATCCAAAGGGATCTATGCCATGGCCTTCCGGGACGTCTTCTTCTGAAGAATCAACCTT  
GCTACCGGAAGTTGGGCTGGAAGTCTATGTGACATTCTTCGAGATCTACAATGGGAAGCT  
GTTTGACCTGCTCAACAAGAACGCCAAGCTTGGCGGTGCTGGAAGACGGCAAGCAACAGG  
TGCAAGTGGTGGGGGCTTGACGGAACATCTGONTAACTCTGCTTGATGATGGCANTCAAG  
ATGATCGACATGGGCAGCGCCTCCAGA

14348.2&14350.1&2

TCCCGAATTCAAGCCACAAAATGGAWAGTGAATGGAAGATGCCTATCATGAACATCAGG  
CAAATCTTTTCCGCCAAGATCTGATGAGACGACAGGAAGAATTAAGACGCATGGAAGAAC  
TTCACAATCAAGAAATCCAGAAACGTAAAGAAAATGCAATTGAGGCAAGAGGAGGAACGA  
CGTAGAAGAGAGGAAGAGATGATGATTCGTCAACGTGAGATGGAAGAACAATGAGGCG  
CCAAAGAGAGGAAAGTTACAGCCGAATGGGCTACATCGATCCACGGGAAAGAGACATGC  
GAATGGGTGGCGGAGGAGCAATGAACATGGGAGATCCCTATGGTTCAGGAGGCCAGAAA  
TTCCACCTCTAGGAGGTGGTGGTCCCATAGGTTATGAAGCTAATCCTGGCGTTCCACCAG  
CAACCATGAGTGGTTCATGATGGGAAGTGACATGGCTACTGAGCGCTTTGGGCAGCCAG  
GTGCGGGGCTGTGGGTGGACAGGGTCTAGAGGAATGGGGCCTGGAATCCAGCAGGAT  
ATGGTAGAGGGAGAGAAGAGTACGAAGCC

14349.1&2

TTGCTGAAGACCCCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCCCAGTGACACCAT  
GAGAAATGTCAGGGCAAAGATCCAAAGACAAGGAAGGCATCCCTCCTGACCAGCAKAGGTTG  
ATCTTTGCTGGGAAACAGCTCGAAGATGGACGCACCCCTGTCTGACTACAACATCCAGAAA  
GAGTCCACCCCTGCACCTGGTCTCTCTCAGAGGTGGGATGCAAAATCTTCTGTGAAGACCC  
TGACTGGTAAGACCATCACCCCTCGAGGTGGACCCAGTGACACCATCGAGAATGTCAAGG  
CAAGATCCAAAGATAAGCAAGGCCATCCCTCTGATCAGCAGAGGTTGATCTTTGCTGGGA  
AACAGCTCGAAGATGGACGCACCCCTGTCTGACTACAACATCCAGAAAGAGTCCACTCTGC  
ACTTGGTCTCTGCGCTTGAGCGCGGGGTGTCTAAGTTTCCCTTTTAAAGGTTTCAACAATTTT  
ATTGCACTTTCTTTCAATAAAGTTGTTCATT

FIG. 15R

000T80" T089E960

14352.1&2

GCGCGGGTGGCTGGGCCACTGGGTGACCGACTTAGCCTGGCCAGACTCTCAGCACCTGGA  
AGCGCCCCGAGAGTGACAGCGTGAGGCTGGGAGGGAGGACTTGGCTTGAGCTTGTAAAC  
TCTGCTCTGAGCCTCCTTGTGCGCTGCATTTAGATGGCTCCCGCAAAGAAGGGTGGCGAGA  
AGAAAAAGGGCCGTTCTGCCATCAACGAAGTGGTAACCCGAGAATACACCATCAACATTC  
ACAAGCGCATCCATGGAGTGGGCTTCAAGAAGCGTGCACCTCGGGCACTCAAAGAGATT  
GGAAATTTGCCATGAAGGAGATGGGAACTCCAGATGTGCGCATTGACACCAGGCTCAACA  
AAGCTGTCTGGGCCAAAGGAATAAGGAATGTGCCATACCGAATCCGTGTGCGGCTGTCCA  
GAAAACGTAATGAGGATGAAGATTCACCAAATAAGCTATATACTTTGGTTACCTATGTACC  
TGTTACCACTTTCAAAAATCTACAGACAGTCAATGTGGATGAGAACTAATCGCTGATCGT

14353.1

AATTCCTTATTTAAATCAACAACTCATCTTCTCAAGCCCCAGACCATGGTAGGCAGCCC  
TCCCTCTCCATCCCCTCACCCACCCCTTAGCCACAGTGAAGGGAATGGAAAATGAGAAGC  
CAGGAGGGCCCTGCCAGGGAAGGCTGCCCCAGATGTGTGGTGAGCACAGTCAGTGCAGC  
TGTGGCTGGGGCAGCAGCTGCCACAGGCTCCTCCCTATAAATTAAGTTCCTGCAGCCACAG  
CTGTGGGAGAAGCATACTTGTAGAAGCAAGGCCAGTCCAGCATCAGAAGGCAGAGGCAG  
CATCAGTGACTCCCAGCCATGGAATGAACGGAGGACACAGAGCTCAGAGACAGAACAGG  
CCAGGGGGAAGAAGGAGAGACAGAATAGGCCAGGGCATGGCGGTGAGGGA

14353.2

TGATCAATCTGGGTGGGCTGGCAGTAGCCCCAGATGATGGGCTCTTCTCTGGGGATCCCAA  
CTGGTTCCCTAAGAAAATCCAAGGAGATCTCTCGGAATCTCTGGATAACCAGCTGCAAGA  
GGGCAAGAACGTGATCGGCTTACAGATGGGCAACCAACCGCGGGCGTCTCANGCAGGCAT  
GACTGGCTACGGGATGCCAGCCAGATCCTCTGATCCCACCCAGGCCCTTCCCCCTGCCCT  
CCCAGGAATGGTTAATATATATGTAGATATATTTTAGCAGTGACATCCCAGAGAGCCC  
CAGAGCTCTCAAGCTCCTTCTGTGACGGTGGGGGTTCAAGCCTGTCTGTCACTCTGA  
AGTGCTGCTGGCATCCTCTCCCCCATGCTTACTAATACATTCCCTTCCCCATAGCC

17182.1&2

AGCGGAGCTCCCTCCCTGGTGGCTACAACCCACACACGCCAGGCTCAGGCATCGAGCAG  
AACTCCAGCGACTGGGTAACCACTGACATTCAGGTGAAGGTGCGGGACACCTACCTGGAT  
ACACAGGTGGTGGGACAGACAGGTGTATCCCGAGTGTACGGGGGGCATGTGCTCTGTG  
TACCTGAAGGACAGTGAGAAAGTTGTACGATTTCCAGTGAGCACCTGGACCCATCACC  
CCACCAAGAACAACAAGGTGAAGTGATCCTGGGGCAGGATCGGGAAGCCACGGGCGT  
CCTACTGAGCATTTGATGGTGAGGATGGCAATGTCCGTATGGACCTTGATGAGCAGCTCAAG  
ATCCTCAACCTCCGCTTCTTGGGGAAGCTCCTCGAAGCCTGAAGCAGGCAGGGCCGGTGG  
ACTTCGTGGATGAAGAGTGATCCTCCTTCTTCCCTGGCCCTTGGCTGTGACACAAGATC  
CTCCTGCAGGGCTAGCCGGATTCTTCTGGATTTCCTTTGTTTTCTTTTAGGTTTCCATCT  
TTTCCCTCCCTGGTCTCAATGGAATCTGAGTAGAGTCTGGGGGAGGGTCCCCACCTTCT  
GTACCTCCTCCCCACAGCTTCTTTTGTGTACCGTCTTTCAATAAAAAGAAGCTGTTTGGT  
CTA

FIG. 15S

17183.2

GGTTCACAGCACTGCTGCTTGTGTGTTGCCGGCCAGGAATCCAGGCTCACAAGGCTATCT  
TAGCAGCTCGTTCTCCCGTTTTAGTGCCATGTTTGAACATGAAATGGAGGAGAGCAAAAA  
GAATCGAGTTGAAATCAATGATGTGGAGCCTGAAGTTTTAAGGAAATGATGTGCTTCATT  
TACACGGGGGAAGGCTCCAAACCTCGACAAAAATGGCTGATGATTTGCTGGCAGCTGCTGAC  
AAGTATGCCCTGGAGCGCTTAAAGGTCAATGTGTGAGGATGCCCTCTGCAGTAACCTGTCCG  
TGGAGAACGCTGCAGAAATTCATCCTGGCCGACCTCCACAGTGCAGATCAGTTGAAAA  
CTCAGGCAGTGGATTTTCATCAACTATCATGCTTCGGATGTCTTGGAGACCTCTTGGG

17186.1&2

TCGTAGCCATTTTTCTGCTTCTTTGGAGAATGACGCCACACTGACTGCTCATTGTCGTTGGT  
TCCATGCCAATTGGTGAAATAGAACCTCATCCGGTAGTGGAGCCGGAGGGACATCTTGTC  
ATCAACGGTGATGGTGCGATTTGAGCATAAGCAGAGCTTGGTGTCTCGCCATACAGGGCA  
AAGAGGTTGTGACAAAGAGGAGAGATACGGCATGCCCTGTGCAGCCCTGATGCACAGTTCC  
TCTGCTGTGTAATCTCCACTGCCCAGCCGGAGGGGCTCCCTGTCCGACAGATAGAAGATCA  
CTTCCACCCCTGGCTTG

17187.1&2

TGGCACACTGCTCTTAAGAACTATGANGATCTGAGATTTTTTGTGTATGTTTTGACTCT  
TTTGAGTGCTAATCATATGTGCTTTATAGATGTACATACCTCCTTGCACAAATGGAGGGG  
AATTCATTTTCATCACTGGGAGTGTCTTATAGTGTATAAAAAACCATGCTGTTATATGGCTTC  
AAGTTGTAAAAATGAAAGTGACTTTAAAGAAAAATAGGGGATGGTCCAGGATCTCCACTG  
ATAAGACTCTTTTAAAGTAACTTAAAGGACCTTTGGGTCTACAAGTATATGTGAAAAAAATG  
AGACTTACTGGGTGAGGAAAATCATCTTTAAAGATGGTGGTGTGTGTGTGTGTGTGTGTG  
TGTGTTGTGTTGTGTTTTGTTTTAAAGGACGGGAATTTATTTACCGTTGCTTGAAATT  
ACTGKGTAAATATATGTYTCATAATGATTTGCTYTTTGVMACATAAAATTAGGVCTGTATA  
AGTWCTARATCCMTCCCTGCCNBTTCATYTTCCMAGATATTCATGATAMCCCTTAAATTT  
GTAACCYGCCTTTTCCCTTTGCTYTCMAATTAAGTCTATTTCMAAAG

17191.1&39.1

GGGGGTAGGCTCTTTATTAGACGGTTATTCCTGTACTACAGGGTCAGAGTGCAGTGTAAAGC  
AGTGTACAGAGGCCCCGCTTCAGCCCAAGAAATGTGGATTTTCTCTCCCTATTGATCACAGTG  
GGTGGGTTTCTTCAGAAAAGCCCCAGAGCCAGGGACCAGTGAGCTCCAAGGTTAGAAGTG  
GAACTGGAAGGCTTCAGTCACATCCTGCTTCCACGCTTCCAGGCTGGGCAGCAAGGAGGA  
GATGCCCCATGACGTGCCAGGTCTCCCCATCTOACACCAGTGAAGTCTGGTAGGACAGCAG  
CCGCACGCTTGCCTCTGCCAGGAGGCCAATCATGGTAGGCAGCATTGCAGGGTCAGAGGT  
CTGAGTCCGGAATAGCAGCAGCGGCAGGTCCCTGCGGAGAGGCCACTTCTGGCCTGAAGAC  
AGCTCCAATTGAGCCCCCTCCAGTACAGGYGTAGTCCCTTGGACCAAGCCACAGCCTGGTA  
AGGGCGCCTGCCAGGGCCACGGCCAGGAGCCA

FIG. 15T

TAATTTCTTAGTCGTTTGAATCCTTAAGCATGCAAAAAGCTTTGAACAGAAGGGTTCACAA  
 AGGAACCAGGGTTGTCTTATGGCATCCAGTTAAGCCAGAGCTGGGAATGCCTCTGGGTTCAT  
 CCACATCAGGAGCAGAAGCACTTGACTTGCTGGTCTCTGCTGCCACGGTTTGGGCGCCACC  
 ACGCCCACGTCCACCTCGTCTCTCCCTGCCGCCACGTCTGGGCGGCCAAGGTCTCCAAAA  
 TTGATCTCCAGCTGAGACGTTATATCATTTGCTGGCTTCCGGAAATGATGGTCCATAACCG  
 AATCTTCAGCATGAGCCTCTTCACTCTTTGATTTATGAAGAACAAATCCCTTCTTCCACTGC  
 CCATCAGCACCTTCAATTTGGTTTTCGGATATTAAATTCTACTTTTGGCCGGTCTTATTTTGA  
 ATAGCCTTCCACTCATCCAAAGTCACTCTTTTGGACCCTCTCTTTTACCTCTTCAACTTCA  
 TTCTCTTATTTTCAAGTGTCTGCCACTGGAATGATGTTCTTACCTTCAGGTGTTTCTCAGTC  
 ACATTTGATTGATCCAAGTCAGTTAATTCGTCTTTGACAGTTCCCCAGTTGTGAGATCCGCT  
 ACCTCCACGTTTGTCTCTGCTTTCAGGCCAGATCTATCACTTCCACTATGCCTATCAAATT  
 CACGTTTGCCACGAGAATCAAATCCATCTCTCGGCCCATTCACGTCCACGGCCCCCTCG  
 ACCTCTTCCAAGACCACCACGACCTCGAATAGGTGCGGTCAATAATCGGTCTATCAACTGAA  
 AATTGCGCTCTTCAACCCTTTTCTTCAAGTGGCTTTTGAATCTTCGTTACAGAGGTGGTCTG  
 CCTTCTGGTCTTCTATCAATTATTTCCCTTACCCTGAAGTTGTTGATCAGGTCTTCTTCC  
 AACTCGTGC

17193

AACCGGATGGACCTGAGTCAGCCGAATCCTAGCCCCCTTCCCTTGGGCTGCTGTGGTGTCTC  
 GACATCAGTGACAGACCGAAGCAGCAGACCATCAAGGCTACGGGAGGCCCGGGCGCTT  
 GCGAAGATGAAGTTTGGCTGCTCTCTCTTCCGGCAGCCTTATGCTGGCTTTGTCTTAAATG  
 GAATCAAGACTGTGAGACCCCTGCGCTCTGCTGAGCAGCCAGCGGAAGTGTACCA  
 TCGCCGTCCACATTCCTCACAGCCACTCGGAAGGCGATGCTGTGGGAGCTGCTGGTGG  
 AGAGACTCGGCATGACTCTCTCTCAGATTACGGCCTTGCTCAGGAAGGGGAAAAGTTTG  
 GTCGAGGAGTGATACCGGGACTCTTGACATTGGGGAAGCTTTCCAAATGCCCGAAGACT  
 TAACTCCCGATGAGGTTGTGGAAGTAGAAAAATCAAGCTGCACTGACCAACCTGAAGCAGA  
 AGTACCTGACTGTGATTCAAACCCAGGTGCTTACTGAGCCCATACCTAGGAAAGGAG  
 GCAAGGATGTATTCAGGTAGACATCCCAAGCACCTGATCCCTTTGGGGCATGAAGTGT  
 GACAAGTGTGGGCTCTGAAAGCAATGTTCCRGAGAAACCAGCTAAATCATGGCACCTTC  
 AATTTGCCATCCTGACCCAGACCTGTATAAAATTAGGTTAAAGATGAATTTCCACTGCTTTG  
 GAGAGTCCCAACCACTAAGCACTGTCCATGTAAACAGGTTCTTTGCTCAGATGAAGGAA  
 GTAGGGGGTGGGGCTTCTTGTGTGATGCTCTTAGGCACACAGCCAAATGTCTCAAGTA  
 CTTTGACCTTAGGTTAGAAGGCAAGCTGCCAGTAAATGTCTCAGCATGCTGCTAATTTT  
 GGTCTGCTAGTTTCTCGATTGTACAAATAAAATGTGTTGTAGATGA

FIG. 15U

16443.1.edit

TCGAGCGGCCGCCCGGGCAGGTGTGCGAGTCCAGCACGGGAGGCGTGGTCTTGTAAGTTGT  
TCTCCGGCTGCCCATTTGCTCTCCCACTCCACGGCGATGTGCGTGGGATAGAAGCCTTTGAC  
CAGGCAGGTGAGGCTGACCTGGTTCTTGGTCACTCCTCCCGGGATGGGGGCAGGGTGTAC  
ACCTGTGGTTCTCGGGGCTGCCCTTTGGCTTTGGAGATGGTTTTCTCGATGGGGGCTGGGA  
GGGCTTTGTTGGAGACCTTGCCTTGTACTCCTTGCCATTCAACCAGTCTGGTGCANGAC  
GGTGAGGACGCTNACCACACGGTACGNGCTGGTGTACTGCTCCTCCCGCGGCTTTGTCTTG  
GCATTATGCACCTCCACGCCGTCCACGTACCAATTGAACCTTGACCTCAGGGTCTTCGTGGC  
TCACGTCCACCACCACGCATGTAACCTCAAANCTCGGNCGCGANACGC

16443.2.edit

AGCGTGGTCCGGGCCGAGGTCTGAGGTTACATGCGTGGTGGTGGACGTGAGCCACGAAGA  
CCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAA  
GCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGCGTCCTCACEGTCCTGCA  
CCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGC  
CCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGAGAACCACAGGTGTACAC  
CCTGCCCCCATCCCCGGGAGGAGATGACCAAGAACAGGTGACCTGACCTGCCTGGTCAA  
AGGCTTCTATCCAGCGACATCGCCCGTGGAGTGGGAGAGCAATGGGCAGCCGGAGAACA  
ACTACAAGACCACGCCTCCCGTGTGACTCCGACACCTGCCGGGCGGCCGCTCGA

16444.2.edit

AGCGTGGTTNCGGCCGAGGTCCCAAGCAAGGCTGCANCTGGATGCCATCAAAGTCTTCTG  
CAACATGGGAGACTGGTGACACCTGCCGTGTACCCCACTCAGCCCAGTGTGGCCGAGAAGAA  
CTGGTACATCAGCAAGAACCCCAAGGACAAGAGCCATGTCTGTTCCGGGAGAGCATGAC  
CGATGGATTCCAGTTCGAGTATGGCCGCCAGGCTCCGACCCTGCCGATGTGGACCTGCCC  
GGCCGGNCGCTCGA

16445.1.edit

AGCGTGGTCCGGGCCGAGGTCAAGAACCCCGCCGACCTGCCGTGACCTCAAGATGTGC  
CACTCTGACTGGAAGAGTGGAGACTACTGGATTGACCCCAACCAAGGCTGCAACCTGGAT  
GCCATCAAAGTCTTCTGCAACATGGAGACTGGTGGACCTGCGTGTACCCCACTCAGCCCA  
GTGTGGCCAGAGAAGTGGTACATCAGCAAGAACCCCAAGGACAAGAGCCATGTCTGGT  
TCGCGGAGACCATGACCGATGGATTCCAGTTCGAGTATGGCGGCCAGGCTCCGACCCTG  
CCGATGTGGACCTGCCCGGCCGCCGCTCGA

FIG. 15V



16445.2.edit

TCGAGCGGTGCGCCGGGCAGGTCCACATCGGCAGGGTCGGAGCCCTGGCCGCCATACTCG  
AACTGGAATCCATCGGNCATGCTCTCGCCGAACCAGACATGCCTCTTGNCTTGGGGTTCT  
TGCTGATGTACCAGNTCTTCTGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACC  
ANTCTCCATGTTGCANAAAGACTTTGATGGCATCCAGGTTGCAGCCTTGGTTGGGGTCAATC  
CAGTACTCTCCACTCTTCCAGACAGAGTGGCACATCTTGAGGTCACGGCAGGTGCGGGCGG  
GGTCTTGACCTCGGTGCGGACCAAGCT

16446.1.edit

TCGAGCGGCCGCGCCGGGCAGGTCTCTCAGAGCGGTAGCTGTTCTTATTGCCCCGGCAGC  
CTCCATAGATNAAGTTATTGCANGAGTTCCTCTCCACGTCAAAGTACCAGCGTGCGAAGG  
ATGCACGGCAAGGCCAGTGAAGTGGCGGTGCAGTATTCTTCATAGTTGAACATATC  
GCTGGAGTGGACTTCAGAACTCTGCTTCTGGGAGCACTTGGGACAGAGGAATCCGCTGC  
ATTCTGCTGGTGGACCTCGGCCGCGACCAAGCT

16446.2.edit

AGCGTGGTGGCGGCCGAGGTCCACCAGCAGGAATGCAGCGGATTCTCTGTCCCAAGTGC  
TCCCAGAAGGCAGGATTCTGAAGACCCTCCAGCGATATGTTCAACTATGAAGAATACTG  
CACCGCCAAGCGAGTCACTGGGCCCTTGGCGTGCATCTTCCCACGCTGGTACTTTGACGTG  
GAGAGGAACTCTGCAATAACTTCATCTATGGAGGCTGCCGGGGCAATAAGAACAGCTAC  
CGCTCTGAGGAGGACCTGCCCGGGCGCGGCTCGA

16447.1.edit

TCGAGCGGCCGCGCCGGGCAGGTCCACATCGGCAGGGTCGGAGCCCTGGCCGCCATACTCG  
AACTGGAATCCATCGGTCATGCTCTCGCCGAACCAGACATGCCTCTTGTCTTGGGGTTCT  
TGCTGATGTACCAGTTCTTCTGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACC  
AGTCTCCATGTTGCAGAAGACTTTGATGGCATCCAGGTTGCAGCCTTGGTTGGGGTCAATC  
CAGTACTCTCCACTCTTCCAGCCAGAAATGGCACATCTTGAGGTCACGGCANGTGGGGCGG  
GGTCTTGACCTCGGCCGCGACCAAGCT

FIG. 15W

00636801.081000

16447.2.edit

AGCGTGGTTCGGGGCCGAGGTCAAGAAACCCCGCCCGACCTGCCGTGACCTCAAGATGTG  
CCTACTCTGGCTGGAAGAGTGGAGAGTACTGGATTGACCCCAACCAAGGCTGCAACCTGGA  
TGCCATCAAAGTCTTCTGCAACATGGAGACTGGTGAGACCTGCGTGTACCCCACTCAGCCC  
AGTGTGGCCCCAGAAGAAGTGGTACATCAGCAAGAACCCCAAGGACAAGAGGCATGTCTGG  
CTCGCGAGAGCATGACCGATGGATTCCAGTTCGAGTATGGCGGCCAGGGCTCCGACCCT  
GCCGATGTGGACCTGCCCCGGGCGGCGCTCGA

16449.1.edit

AGCGTGGTTCGGGGCCGAGGTCTGTGACAGTGGCACTGGTAGAAGNTCCAGGAACCTGA  
ACTGTAAGGGTTCTTCATCAGTGCCAACAGGATGACATGAAATGATGTACTCAGAAGTGTG  
CTGNAATGGGGCCCATGANATGGTTGCTGAGAGAGAGCTTCTTGTCTACATTCCGGCGG  
GTATGGTCTTGGCCTATGCCCTATGGGGGTGGCCGTTGNGGGCGGTGNGGTCCGCCTAAAA  
CCATGTTCTCAAAGATCATTTGTTGCCCAACACTGGGTTGCTGACCANAAGTGCCAGGAA  
GCTGAATACCATTTCCAGTGTCTATCCAGGGTGGGTGACGAAAGGGGTCTTTTGAAGTGT  
GGAAGGAACATCCAAGATCTCTGNTCCATGAAGATTGGGGTGTGGAAGGGTTACCAGTTG  
GGGAAGCTCGCTGTCTTTTCTTCCAATCANGGGCTCGCTCTTCTGAATAATTCTCAGGGC  
AATGACATAAAATTGTATATTGGTTCCCGGTTCCAGGCCAG

16450.1.edit

TCGAGCGGGCGGGCGGGCAGGTCCACCACACCCAAATTCCTTGCTGGTATCATGGCAGCCGC  
CACGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAAGCCTGGGTCTCTCCAGAGA  
AGTGGTCCCTCGGGCGGGCGGGCTGCTCAGAGGCTACTATTACTGGCCTGGAACCGGGA  
ACCGAATATACAATTTATGTCAATGGCCTGAAGAATAATCAGAAGAGCGAGCCCTGATTG  
GAAGGAAAAAGACAGAGAGCTTCCCAACTGGTAACCTTCCACACCCCAATCTTCATG  
GACCAGAGATCTTGGATGTTCTTCCACAGTTCAAAAGACCCCTTTCGTACCCACCTGG  
GTATGACACTGGAAATGGTATTACGCTTCTGGCACTTCTGGTCAGCAACCCAGTGTGGG  
CAACAAATGATCTTTGANGAATGNTTTAGGGCGGACACACCGGCCACAACGGGCCACC  
CCCATAGGCCATAGGCCAAGAACATACCCGNGCAATGTAGGACAAGAAGCTCTNTCTCAN  
ACAANCAATCTCATGGGCCCCCATTCANGACACTTCTGAGTACATCANTTCATGGCATCCTG  
GTGGCACTGATAAAAACCTTACAGTTA

16450.2.edit

AGCGTGGTTCGGGGCCGAGGTCTGTGACAGTGGCACTGGTAGAAGTTCCAGGAACCTGA  
ACTGTAAGGGTTCTTCATCAGTGCCAACAGGATGACATGAAATGATGTACTCAGAAGTGTG  
CTCGAATGGGGCCCATGAGATGGTTGCTGAGAGAGAGCTTCTTGTCTACATTCCGGCGGG  
TATGGTCTTGGCCTATGCCCTATGGGGGTGGCCGTTGTGGGCGGTGTGGTCCGCCTAAAA  
CATGTTCTCAAAGATCATTTGTTGCCCAACACTGGGTTGCTGACCAGAAGTGCCAGGAAG  
CTGAATACCATTTCCAGTGTCTATCCAGCGGTGGGTGACGAAAGGGCTCTTTTGAAGTGTG  
GAAAGGAACATCCAAGATCTCTGGTCCATGAAGATTGGGGTGTGGAAGGGTTACCAGTTGG  
GGAAGCTCGTCTGTCTTTTCTTCCAATCANGGGCTCGCTCTTCTGATTATTCTTCAGGGC  
AATGACATAAAATTGTATATTGGTCCCGGTTNAGCCCAATAATAAACCCTCTGTGACA  
CCANGGCGGGCGGCAAGGANCAT

FIG. 15X

00636801.081000

16451.1.edit

AGCGTGGTCCGCGGCCGAGGTCCTCACCAGAGGTACCACCTACAACATCATAGTGGAGGCA  
CTGAAAGACCAGCAGAGGCATAAGGTTCCGGAAGAGGTTGTTACCGTGGGCAACTCTGTC  
AACGAAGGCTTGAACCAACCTACGGATGACTCGTGCTTTGACCCCTACACAGTTTCCCAT  
ATGCCGTTGGAGATGAGTGGGAACGAATGTCTGAATCAGGCTTTAAACTGTTGTGCCAGTG  
CTTANGCTTTGGAAGTGGTCAATTCAGATGTGATTCATCTAGATGGTGCCATGACAATGGT  
GTGAACTACAAGATTGGAGAGAAGTGGGACCGTCAGGGAGAAAATGGACCTGCCCCGGGC  
GCCGCTCGA

16451.2.edit

TCGAGCGGCCGCCCCGGGCAGGTCCATTTTCTCCCTGACGGTCCCACTTCTCTCCAATCTTGT  
AGTTCACACCATTTGTATGGCACCATCTAGATGAATCACATCTGAAATGACCACTTCCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTTCAGACATTCGTTCCCACTCATCTCCA  
ACGGCATAATGGGAAACTGTGTAGGGGTCAAAGCAGGATCATCCGTAGGTTGGTTCAAG  
CCTTCGNTGACAGAGTTGCCCCACGGTAACAACCTCTTCCCGAACCTTATGCCTCTGCTGGT  
CTTTCAGTGCCCTCCACTATGATGTTGTAGGTGGTACCTCTGGTGAGGACCTCGGCCGCGAC  
CACGCT

16452.1.edit

AGCGTGGCCGCGGCCGAGGTCCATTCGCTGGAACGGCATCAACTTGGGAAGCCAGTGATCG  
TCTCAGCCTTGGTTCTCCAGCTAATGGTGAATGGNGGTCTCAGTAGCATCTGTACACAGGAGC  
CCTTCTTGGTGGCTGACATTCCTCCAGAGTGGTGACAACACCTGAGCTGGTCTGCTTGT  
AAAGTGTCTTAAGAATCATACACACTCACTTCATAATGGCGNCCACCATAAGTCCTGATA  
CAACCACGGAATGACCTGTCAGGAAC

16452.2.edit

TCGAGCGGCCGCCCCGGGCAGGTCCATTCGCTGGAACGGCATCAACTTGGGAAGCCAGTGATCG  
CTTGACGATGATATCGAGAGCCAGCCCTGATTGGAACCCAGTCCACAGCTATTCCTGCA  
CCAAGTACCTGAAGTTCACTCAGGTACACCCACAAGCCTGAGCGCCAGTGGACACCA  
CCCAATGTTCAAGCTCACTGGATATCGAGTGGGGTGACCCCCAAGGAGAAGACCGGACCA  
ATGAAAGAAAATCAACCTTCTCTCCTGACAGCTCATCCGTGGTTGTATCAGGACTTATGGCGG  
CCACCAAATATGAAGTGAAGTCTATGCTCTTAAGGACACTTTGACAAGCAGACAGCTCA  
GGGTGTTGTACCACTCTGGAGAAATGTCAGCCCAACCAAGAAGGGCTCGTGTGACAGATGC  
TACTGAGACCACCATCACCAATAGCTGGAGAACCAAGACTGAGACGATCACTGGCTTCCA  
AGTTGATGCCGTTCCAGCCAATGACCTCGCCCGCCACCACGCTT

FIG. 15Y

16453.1.edit

AGCGTGGTCCGGCCGAGGTCTGGCCGAAGTCCAGGTGTACAGGGAAGATGTACATGTTA  
TAGNTCTTCTCGAAGTCCCGGGCCAGCAGCTCCACGGGGTGGTCTCCTGCCTCCAGGCGCT  
TCTCATTTCTCATGGATCTTCTTCACCCGAGCTTCTGCTTCTCAGTCAGAAGGTTGTTGTCC  
TCATCCCTCTCATAACAGGGTGACCAGGACGTTCTTGAGCCAGTCCCGCATGCGCAGGGGGA  
ATTCGGTCAGCTCAGAGTCCAGGCAAGGGGGGATGATTTGCAAGGCCCCGATGTAGTCCA  
AGTGGAGCTTGTGGCCCTTCTTGGTGCCCTCCAAGGTGCACTTTGTGGCAAAGAAGTGGCA  
GGAAGAGTCGAAGGTCTTGTGTGCAATTGCTGCACACCTTCTCAAAGTCCGCAATGGGGGCT  
GGGCAGACCTGCCCGGGCGGCCGCTCGA

16453.2.edit

TCGAGCGGCGCCCGGGCAGGTCTGCCCAGCCCCATTGGCGAGTTTGAGAAGGNGTGCA  
GCAATGACAACAAAGACCTTCGACTCTTCTGECACCTTCTTTGCCACAAAGTGACCCCTGGA  
GGGCACCAAGAAGGGCCACAAGCTCCACCTGGACTACATCGGGCCTTGCAAATACATCCC  
CCCTTGCTGGACTCTGAGCTGACCGAATTCCTTGGCGATGCGGGACTGGCTCAAGAAC  
GTCTGGTCACCTGTATGAGAGGGATGAGGACAACAACTTCTGACTGAGAAGCANAAG  
CTGCGGGTGAAGAANAATCCATGAGAATGANAAGCGCTGNAGGCANGAGACCACCCCGT  
GGAGCTGCTGGCCCGGGACTTCGAGAAGAACTATAACATGTACATCTTCCCTGTACACTGG  
CAGTTCGGCCAGACCTCGGCGCGGACCAAGCT

16454.1.edit

AGCGTGGNTCCGGACGACGCCCCACAAAGCCATTGTATGTAGTTTTANTTCAGCTGCAAAAN  
AATACCNCCAGCATCCACCTTACTAACCAGCATATGCAGACA

16454.2.edit

TCGAGCGGTCCGCGGGCCAGGTCTGGGCGGATAGCACCGGGCATATTTTGGAAATGGATGA  
GGTCTGGCACCTTGAGCAGCCCCAGGAGGACTTGGTCTTAGTTGAGCAATTTGGCTAGGA  
GGATAGTATGCCAGCACCGTTCTGAGTCTGTGGGATAGCTGCCATGAAGNAACCTGAAGGA  
GGCGCTGGCTGGTANGCGTTGATTACAGGCTGGGAACAGCTCGTACACTTGCCATTCTCT  
GCATATACTGGNTAGTGAGCCGAGGCTGGCGCTCTTCTTGGCTGAGCTAAAGCTACATA  
CAATGGCTTTGNGGACCTCGGCGCGGACCAAGCTT

FIG. 15Z

166

16455.1.edit

TCGAGCGGCCGCGCCGGCCAGGTCCATTTTCTCCCTGACGGTCCCACTTCTCTCCAATCTTGT  
AGTTCACACCATTTGTCATGACACCATCTAGATGAATCACATCTGAAATGACCACTTCCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTCAGACATTCGTTCCCACTCATCTCCA  
ACGGCATAATGGGAACTGTGTAGGGGTCAAAGCACGAGTCATCCGTAGGTTGGTTCAAG  
CCTTCGTTGACAGAAGTTGCCCACGGTAACAACCTCTTCCCGAACCTTATGCCTCTGCTGGT  
CTTCAAGTGCCTCCACTATGATGTTGTAGGTGGCACCTCTGGTGAGGACCTCGGCCGCGA  
CCACGCT

16455.2.edit

AGCGTGGTTTTCGGGCCGAGGTCCCTACCANAGGTGCCACCTACAACATCATAGTGGAGGC  
ACTGAAAGACCAGCAGAGGCATAAGGTTTCGGGAAGAGGTTGTTACCGTGGGCAACTCTGT  
CAACGAAGGCTTGAACCAACCTACGGATGACTCGTGCTTTGACCCCTACACAGNTTCCCAT  
TATGCCGTTGGAGATGAGTGGGAACGAATGTCTGAATCAGGCTTTAAACTGTTGTGCCAGT  
GCTTANGCTTTGGAAAGTGGTCATTTAGATGTGATTCATCTANATGGTGTCATGACAATGG  
TGNGAACTACAAGATTGGAGAGAAGTGGNACCGTCAGGGGANAAAAATGGACCTGCCCGG  
GCGGCNCGCTCGA

16456.1.edit

AGCGTGGTTCGGGCCGAGGTCTGGCTTCTGCTCANGTGATTATCCTGAACCATCCAGGCC  
AAATAAGCGCCCGCTATGCCCTGNAATGGATTGCCACACGGCTCACATTGCATGCAAGTT  
TGCTGACCTGAAGGAAAAGATTGATC

16456.2.edit

TCGAGCGGCCGCGCCGGCCAGGTCCAAATGAAACAAACAGTTCTGAGACCGTTCTTCCACCA  
CTGATTAAGAGTGGCGGCGCGGCTATTAGGGATAATATTCAATTAGCCTTCTGAGCTTTCT  
CGGCAGACTTGGTGACCTTGGCAGCTCCAGCAGCTTCTGGTCCACTGCTTTGATGACACC  
CACCGCAACTGTCTGTCTCATATCAGGAACAGCAAGCGGACCCAAAGGTGGATAGTCTGA  
GAAGCTCTCAACACACATCGGCTTGGCAGGAACCATATCAACAATGGGCAGCATCACCAG  
ACTTCAAGAAATTAAGGGCCATCTTCCAGCTTTTACCAGAACGGCGATCAATCTTTTCTT  
CAGCTCAGCAAACTTGCAATGATGTGAGCCG

FIG. 15AA

16459.1.edit

TCGAGCGGCGCGCGCGGAGGTCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAG  
CCACTCCAATTGCTGGCGGCTTCACTCCTGGAACCTTCACTAACCAGATCCAGGCAGCCTT  
CCGGGAGCCACGGCTTCTTGTTGNTACTGACCCAGGGCTGACCACCAGCCTCTCACGGAG  
GCATCTTATGTAACTACCTACCAATTGCGCTGTGTAAACACAGATTCTCCTCTGCGCTATGT  
GGACATTGCCATCCCATGCAACAACAAGGGAGCTCACTCAGNNGGGTTTGATGTGGTGGGA  
TGCTGGCTCGGGAAGTTCTGCGCATGCGTGGCACCATTTCCTGTAACACCCATGGGGANGN  
CATGCCTGATCTGGACTTCTACAGAGATCCTGAAGAGATTGAAAAAGAAGAACAGGCTGN  
TTGCTGANAAAGCAAGTGACCAAGGANGAAATTCANGGGTGAAANGGACTGCTCCCGCT  
CCTGAATTCAGTCTACTCAACCTGANGNTGCAGACTGGTCTTGAAGGNGNACANGGGCC  
CTCTGGGCCTATTAAAGCANCTTCGGTCGCGAACACGNT

16459.2.edit

AGCGTGNGTCGCGGCGGAGGTGCTGAATAGGCACAGAGGGCACCTGTACACCTTCAGACC  
AGTCTGCAACCTCAGGCTGAGTAGCAGTGAACCTCAGGAGCGGGAGCAGTCCATTCACCCT  
GAAATTCCTCCTTGNCACCTGCTTCTCAGCAGCAGCCTGCTCTTCTTTTCAATCTCTTCA  
GGATCTCTGTAGAAGTACAGATCAGGCATGACCTCCCATGGGTGTTACGGGAAATGGTG  
CCACGCATGCGCAGAACTTCCCGAGCCAGCATCCACCACATCAAACCCACTGAGTGAGCT  
CCCTTGTTGTTGTCATGGGATGGGCAATGTCCACATAGCGCAGAGGAGAATCTGTGTTACAC  
AGCGCAATGGTAGGTAGGTTAACATAAGATGCCTCCGCGAGAAGCTGGTGGTCAGCCCTG  
GGGTCAAGTAACCACAAGAAGCCGTGCTTCCCGGAAGGCTGCCTGGATCTGGTTAGTGAA  
GGNTCCAGGAGTGAAAGCGGCCAACAAATGCGAGTGGCTTCAGTGGCAAGCAGCAAATTC  
GCACAAGCCCTCTGGACCTGCCCCGGCGCGCTCGA

16460.1.edit

TCGAGCGGCGCGCGCGGAGGTCCATTTCTCCCTGACGGNCCCACTTCTCTCCAATCTTGT  
AGTTCACACCAATTGTCTAGGCACTCTAGATGAATCACATCTGAAATGACCATTCCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTCAGACATTCGTTCCCACTCATCTCCA  
ACGGCATAATGGGAAACTGTGTAGGGGTCAAAGCAGAGTCAATCCGTAGGTTGGTTCAAG  
CCTTCGTTGACAGAGTTCCCGACGGTAACAACCTCNTCCCGCAACCTTAATGCTCTGCTGG  
GCTTTCAGNGCCTCCACTATGATGNTGTAGGGGGGACCTCTGGNGANGACCTCGGCGCG  
GACCACGCT

16460.2.edit

AGCGTGCTCGCGCGGAGGTCTCACCAGAGGTGCCACCTACAACATCATAGTGGAGGCA  
CTGAAAGACCAGCAGAGGCATAAGGCTCGGGAAGAGGTTGTTACCGTGGGCAACTCTGTC  
AACGAAGCCTTGAACCAACCTACGGATGACTCGTGCTTGGACCCCTACACAGTTTCCCAAT  
ATGCGGTTGGAGATGACTGGGAACGAATGTCTGAATCAGGCTTTAAACTGTTGTGCCAGTG  
CTTANGCTTTGGAAGTGGCTCAATTCAGATGTGATTATCTAGATGGTGCCATGACAATGG  
NGNGAACTACAAGATTGGAGAGAAAGTGGNACCGNCAGGAGAAAAATGGACCTGCCCCGG  
CGGCGGCTCGA

FIG. 15BB

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16461.1.edit

AGCGTGGTTCGGGGCCGAGGTCCACATCGGCAGGGTTCGGAGCCCTGGCCGCCATACTCGAA  
CTGGAATCCATCGGTTCATGCTCTCGCCGAACAGACATGCCTCTTGTCCTTGGGGTTCTTGC  
TGATGTACCAGTTCTTCTGGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACCAGT  
CTCCATGTTGCAGAAGACTTTGATGGCATCCAGGNTGCAACCTTGGTTGGGGTCAATCCAG  
TACTCTCCACTCTTCCAGCCAGAGTGGCACATCTTGAGGTACGGCAGGTGCGGNCGGGGG  
NTTTGCGGCTGCCCTCTGGNCTTCGGNTGTNCTCNATCTGCTGGCTCA

16461.2.edit

TCGAGCGGGCCCGCCGGGCAGGTCTCGCGGTTCGCACTGGTGATGCTGGTCCTGTTGGTCCCC  
CCGGCCCTCCTGGACCTCCTGGCCCCCTGGTCTCCAGCGCTGGTTTCGACTTCAGCTTC  
CTGCCCCAGCCACCTCAAGAGAAGGCTCAGCATGGTGGCCGCTACTACCGGGCTGATGAT  
GCCAATGTGGTTCTGTGACCGTGACCTCGAGGTGGACACCACCCTCAAGAGCCTGAGCCAG  
CAGATCGAGAACATCCGGAGCCCCAGAGGCCAGNCGCAAGAACCCCGCCCGCACCTGCCGT  
GACCTCAAGATGTGCCACTCTGACTGGAAGAGTGGAGAGTACTGGATTGACCCCAACCAA  
GCTGCAACCTGGATGCCATCAAAGTCTTCTGCAACATGGAGACTGGTGAGACCTGCGTGTA  
CCCCACTCAGCCAGTGTGCCCAAAAAGAACTGGTACATCAGCAAGAACCCCAAGGACAA  
GAAGCATGTCTGGTTTCGGCGAGAACATGACCGATGGATTCCAGTTCGAGTATGGCGGGCA  
GGGCTCCGACCCTGCCGATCGGGACCTTGGCCGCGAACACGCT

16463.1.edit

AGCGTGGNNGCGGCCGAGGTATAAATATCCAGNCCATATCCTCCCTCCACACGCTGANAG  
ATGAAGCTGTNCAAAGATCTCAGGGTGGANAAAACCAT

16463.2.edit

TCGAGCGGGCCCGCCGGGCAGGTCTTCAGACTTGGACTGTGTCACTGCCAGGCTTCCAG  
GGCTCCAACCTTGCAGACGGCTGTGTGGGACAGTCTCTGTAATCGCGAAAGCAACCATG  
GAAGACCTGGGGGAAAACACCAATGGTTTATCCACCCTGAGATCTTTGAACAACCTTCATCT  
CTCAGCGTGGGAGGGAGGCTCTGCACTGGATAATTTCTACCTCGGCCGCGACCACGCT

FIG. 15CC

09636801.081000

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16464.1.edit

CGAGCGGGCGACCGGGCAGGTNCAGACTCCAATCCANANAACCATCAAGCCAGATGTCAG  
AAGCTACACCATCACAGGTTTACAACCAGGCACTGACTACAAGANCTACCTGCACACCTTG  
AATGACAATGCTCGGAGCTCCCCGTGGTCAATCGACGCTCCACTGCCATTGATGCACCAT  
CAAACCTGCGTTTCTGGCCACCACACCCAATTCTTGCTGGTATCATGGCAGCCGCCACG  
TGCAGGATTACCGGTACATCATCNAGTATGANAAGCCTGGGCTCCTCCCAGAGAAGNG  
GTCCCTCGGCCCCCGCCTGNTGTCCANAGGNTACTATTACTGNGCCNGCAACCGGCAACC  
GATATCNATTTTGNCAATTGGCCTTCAACAATAATTA

16464.2.edit

AGCGTGTTTCGCGGCCGANGTCCTGTCAGAGTGGCACTGGTAGAAGTTCAGGAACCCTG  
AACTGTAAGGGTTCTTCATCAGNGCCAACAGGATGACATGAAATGATGTACTCAGAAAGTG  
TCCTGGAATGGGGCCCATGAGATGGTTGTCTGAGAGAGAGCTTCTTGNCCTGTCTTTTCC  
TTCCAATCAGGGGCTCGCTCTTCTGATTATTCTTCAGGGCAATGACATAAATTGTATATTCCG  
GGTCCCGGNTCCAGGCCAGTAATAGTANCCTCTGTGACACCAGGGCGGNGCCGAGGGACC  
ACTTCTCTGGGAGGAGACCCAGGCTTCTCATACTTGATGATGTAACCGGTAATCCTGGCAC  
GTGGCGGCTGCCATGATACCAGCAAGGAATTGGGGTGTGGTGGCCAGGAAACGCAGGTTG  
GATGGNGCATCAATGGCAGTGGAGGCCGTGATGACCACAGGGGGAGCTCCGACATTGTC  
ATTCAAGGTG

16465.1.edit

AGCGTCGNCGCGCGCCGAGGTGCAGCGCGGGCTGTGCCACCTTCTGCTCTCTGCCCAACGAT  
AAGGAGGGTNCCTGCCCCCAGGAGAACATTAACNTCCCCAGCTCGGCCTCTGCCGG

16465.2.edit

TCGACCGCGCGCGCGCGGCGCAGGTTTCTGCTGAAAGTGGNTACTTTATTGGNTCGGAAAAG  
GGAGAAGCTGTGGTCAAGCCCAAGAGGGAATACAGAGNCCCGAAAAGGGGAGGGCCAGGT  
GGGCTGGAACCAAGACGCGCGCGGCGGAGGCAAACTTCTCTCTCACTGCTCAGCCTGGTG  
GTGGCTGGAGCTCANAAATTGGGAGTGACACAGGACACCTTCCCACAGCCATTGGCGCGG  
CATTTCTCTGGCCAGGACACTGGCTGTCCACCTGGCAGTGGTCCCGACAGAAGCCCGAGC  
TGGGGAAGTTAATGTTACCTGGGGGCGGGAACCTCCTTATCATTTGNGCAGAGAGCAG  
AAGGTGGCACAGCCCGCGCTGCACCTCGGCGCGGACCACGCT

16466.2.edit

TCGAGCGCGCGCGCGCGGCGCAGGTCCACCATAAGTCTTGATACAACCACGGATGAGCTGTCA  
GGAGCAAGGTTGATTTCTTTCAATGGTCCGNCCTTCTCTTGGGCGNCACCCGCACTCGAT  
ATCCAGTGAGCTGAACATTTGGCTGGGCTCCACTGGGCGCTCAGGCT

16467.2.edit

TCGAGCGGTTTCGCGCGCGGCGCAGGTCCACCACACCCAATTCTTGCTGGTATCATGGCAGCCG  
CCACGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAGCCTGGGTCTCTCCAGAG  
AAGCGGTCCCTCGGCCCCGCGCTGGTGTACAGAGGCTACTATTACTGGCCTGGAACCGGG  
AACCGAATATACAATTTATGTCAATGNCCTGAAGAATAATCANNAANAGGGANCCCCCTGA  
TTGGAAGGA

FIG. 15DD



**000000000000**

02\_16469.edit

TCGAGCGGNCGCCCGGGC.AGGTCTGCC.AACACCAAGATTGGCCCCGCCGCATCCACACA  
GTCCGTGTGCGGGGAGGTAACAAGAAATACCGTGCCCTGAGGTTGGACGTGGGGAATTC  
TCCTGGGGCTC.AGAGTGTTGTA CTCTCGT.AAAACAAGGATCATCGATGTTGTCTACAATGCAT  
CTAATAACGAGCTGGTTCGTACCAAGACCCTGGTGAAGAATTGCATCGTGCTCATCGACAG  
CAC.ACCGTACCGACAGTGGTACGAGTCCC.ACTATGCGCTGCCCTGGGCCGCAAGAAGGG  
AGCCAAGCTGACTCCTGAGGAAGAAGAGATTTTAAACA.AAAAAACGATCTAANAAAAAAA  
AAACAAT

AGCGTGGTGC GCGGCCGAGGTGAAATGGTATTCAGCTTCCTGGCACTTCTGGTCAGCAACCC  
AGTGTGGGCAACAAATGATCTTTCAGCAACATGGTTTTAGGCGGACCACACCGCCCA  
ACGGCCACCCCCATAAGGCATAGGCCAAGACCATACCGCCGAATGTAGGACAAGAAGCT  
CTCTCTCAGACAACCACTCTCATCGCGCCCCATTCAGGACACTTCTGAGTACATCATTTCTATG  
TCATCCTGTTGGCACTGATGAAGAACCCTTACAGTTACGGGTTCTCTGGAACCTTCTACCAGT  
GCCACTCTGACAGGACCTGCCCGGGCGGGCGCTCGA

TCGAGCGGGCGCCGGGCAGGTCTGTGTCAGAGTGGCACTGGTAGAAGTTCCAGGAACCCCT  
GAACTGTAAACGGTTCCTTCATCAGTGGCAACAGGATGACATGAAATGATGTACTCAGAAAGT  
GTCTTGGAAATGGGGCCCATGAGATGGTGTCTGAGAGAGAGCTTCTGTCTTACATTCCGGC  
GGGTATGGTCTTTGGCCTATGCCCTATGGGGGTGGCCGTGTGGGCGGTGTGGTCCGCCCTAA  
AACCATGTTCTCAAAAGATCAATTTGTGCCCAACACTGGGTTCCTGACCAGAAGTGCCAGG  
AAGCTGAATACCATTTACCTCGCCCGCGACCACGGCTA

TCGAGCGCGCGCCCGCGGCACGCTCTCCCTCTTGCGGGCCAGGGCCAGCGCATAGTGGGAC  
TCGTACCACTGTTCGGTACGGCTGTCTGTGGATGACGACGATGCAATTCTTACCAGGGTCT  
TGGTACGAACCAAGCTCGTTATTAGATCCATTGTAGACAACATCGATGATCCTTGTTTTACG  
AGTACAACACTCTGAGCCCCAGGAGAAATCCCCAGTCCAACCTCAGGGCACGGTATTTC  
TTGTTACCTCCCCGCACACGGACTGTGTGGATGCGCGCGGGGCCAAGCTGACTCCTGAGGA  
ADAAGAGATTTTAAACAATAAAGCATCTAAAAAAATTAGAAGAAATATGATGAAAGGA  
AAAAGAATGCCAAATCAGCAGTCTCCTGGAGGACGATTCCAGCAGGGCAAGCTTCTTG  
CGTGCATCGCTTCAAGGGCCCGGCACAGTGTGACCGACAGATGGCTATGTGCTAGAGGGCA  
AAGAAGTGGAGTCTATCTTAAGAAAATCAGGCGCCAGCAATGGTGNGTCTTCAACTAATC  
CAAAGGGGAGTTTCAGACCAGTGCAAATCAGCAAAAACATTGATACTGNTGGCCAAATTTA  
TTGGTGCAGGGCTTGCACANTANGANNCCCTGGGTCTTGGGGCTTGGATTGGNACAAGCT  
TTGGCAGCCTTTTCTTTGGTTTTGCCAAAAACCTTTGNTGAAGANGANACCTNGGCGGA  
CCCTTAACCGATTCCACNCCNGGNGCCCTTCTANGNCCCNCTTG

FIG. 15EE

06\_16471.edit

AGCGTGGTCGCGGCCGAGGTCTGCTGCTTCAGCGAAGGGTTTCTGGCATAACCAATGATA  
AGGCTGCCAAAGACTGTTCCAATACCAGCACCAGAACCCAGCCACTCCTACTGTTGCAGCAC  
CTGCACCAATAAAATTTGGCAGCAGTATCAATGTCTCTGCTGATTGCACTGGTCTGAAACTC  
CCTTTGGATTAGCTGAGACACACCATTTCTGGGCCCTGATTTTCTAAGATAGAACTCCAAC  
TCTTTGCCCTCTAGCACATAGCCATCTGCTCGGTCACTGTCCCGGCTTGAAGCGATGC  
ACGCAAGAAGCTTGGCCTGCTGGAAGTCTCTCCAGGAGACTGCTGATTTTGGCATTCTT  
TTTCCTTTCATCATATTTCTTCTGAATTTTTTAGATCGTTTTTTGTTTAAATCTCTTCTTCC  
TCAGGAGTCAGCTTGGCCCCCGCCGATCCACACAGTCCGTGTGCGGGGAGGTAACAAGA  
AATACCGTGGCCTGAGGTTGGACGTGGGGAATTTCTCTGGGGCTCAGAGTGGTGTACTCG  
TAAACAAGGATCATCGATGGTGNCTACAATGCATCTAATAACGAGCTGGGTGCGACCCA  
AAGAACCTGGNGAANAATAATGGATCGNCTCATCGACAGGACACCGTACCCGACAGGGGNA  
CGANTCCCACTATGCGCTTGGCCCTGGGCCGCAANAAGGAAAAGTGGCCGGCGGCCNT  
CGAAAGCCCCAATTNTGGAAAAATCCATCACTGGGNGGCCNGTCGAGCATGCATNTAN  
AGGGGCCCATCCCCCTNANN

07\_16472.edit

TCGAGCGGGCCCGCCCGGGCAGGTCCCCAACCAAGGCTGCAACCTGGATGCCATCAAAGTCT  
TCTGCAACATGGAGACTGGTGAGACCTGGGTGTACCCCACTCAGCCCAGTGTGGCCAGAG  
AGAAGTGGTACATCAGCAAGAACCCCAAGGACAAGAGGCATGTCTGGTTCGGCGAGAGCA  
TGACCGATGGATTCCAGTTCGAGTATGCGCGCCAGGGCTCCGACCCTGCCGATGTGGACCT  
CGGCCGCGACCAAGCT

08\_16472.edit

AGCGTGGTCGCGGCCGAGGTCCACATCGGCAGGGTGGAGCCCTGGCCGCCATACTCGAA  
CTGGAATCCATCGGTCTGCTCTCGCCCAACCAGACATGCCTCTTGTCTTGGGGTCTTGG  
TGATGTACCAGTCTTCTCGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACCAGT  
CTCCATGTTCCAGAAGACTTTGATGGCATCCAGGTTGCAGCCTTGGTTGGGGACCTGCCCC  
GGCGGCCGCTCGA

09\_16473.edit

TCGAGCGGGCCCGCCCGGGCAGGTCCACCACACCCAAATTCCTTGCTGGTATCATGGCAGCCGC  
CACGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAGCCTGGGTCTCCTCCAGAGA  
AGTGGTCCCTCGGCCCGCCCTGGTGTACACAGGCTACTATTACTGGCCTGGAACCGGGA  
ACCGAATATACAATTTATGTCAATGGCCTGAAGAATAATCAGAAGAGCCGAGCCCTGATTG  
GAAGGAAAAAGACAGACGAGCTTCCCAACTGGTAACCCCTTCCACACCCCAATCTTTCATG  
GACCAGAGATCTTGGATGTTCTTCCACAGTTCAAAAGACCCCTTTCGTACCCACCCCTGG  
GTATGACACTGGAAATGGTATTCAGCTTCTGGCACTTCTGGTCAGCAACCCAGTGTGGG  
CAACAAATGATCTTTGAGGAACATGGNTTACGCCGACCCACACCGCCCAACACGGGCCACC  
CCCATAGGCATAGGCCAAGACCATAACCGCCGAATGTAGGACAAGAAGCTNTNTNNTCAN  
ACACCATNTNATGGCCCCCATTCAGGACACTTCTGAGTACATCATTTATGNCATCTGTGG  
CACTTGATGAAAAACCTTACAGTTCAGGCTTCTGGAACTTTTACCAGGCCTNTTACAGGAC  
TNGCCCGGACNCCCTAAGCCNATTCACCTGGGGCGTTCTANGGTCCCACTCGNNCACTG  
GNGAAAAATGGCTACTGTN

FIG. 15FF

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11\_16474.edit

AGCGTGGTCGCGGCCGAGGTCCACTAGAGGTCTGTGTGCCATTGCCCAGGCAGAGTCTCTG  
CGTTACAACTCCTAGGAGGGCTTGCTGTGCGGAGGGCCTGCTATGGTGTGCTGCGGTTCA  
TCATGGAGAGTGGGGCCAAAGGCTGCGAGGTTGTGGTGTCTGNGAACTCCNAGGACANG  
AGGGCTAAATTCCATGAAGTTTGTGGATGGCCTGATGATCCACAATCGGAGACCCTGTAA  
CTACTACCGTCTNACCNCCTGCTGTNCNCCCCNTTCTGCTNAANACATNGGGNTNNTNC  
TTGNCNTCCTTGGGTNGAANAENNAENGCCTNCCNTTCTNANCNTACTNGNTCCANA  
NTTGGCCTTTAAANAATCCNCCTTGCCTTNNCACTGTTCAANNNTTNTTNTCGTAAACCCT  
ATNANTNNAATTANAENNTNNNNNCTCACCCCCCTCCTCATTNANCCNATANGCTNNA  
ANTCCTTNANNCCTCCCNCCNNTNCTNCTNACTNANTNCTTCTNCCCATTACNNAGCT  
CTTTCNTTTAANATAATGNGCCNNGCTCTNCAINTCTACNATNTGNNNAATNCCCCNCC  
CCNANCGNNTTTTGGCTNNAACCTCCTTCTTCCCTNCCNAAATTNCCNANTTCC  
NCNTTCCNNTTTCGGNTNNTCCCATNCTTCCANNCTTCACTANCNCTNCAACT  
TATTTCTNTCATCCCTTNTTCTTACANNCCCCCTNNTCTACTCNCNNTTNCATTANAT  
TTGAAACTNCCACNNTANTTNCCTCCTCTACNNTTTATTTTNCGNTCCTCTACNTAAT  
ANTTTAATNANTTNTCN

12\_16474.edit

TCGAGCGGGCGGGCGGGCAGGTCTGCCAAGGAGACCCTGTTATGCTGTGGGGACTGGCTG  
GGGATGGCAGCGGGCTCTGGCTTCCACCTTCTGTTCTGAGATGGGGGTGGTGGGCAGT  
ATCTCATCTTTGGGTCCACAATGCTCAGGTGGTCAGGCAGGGGCTTCTTAGGGCCAATCT  
TACCAGTTGGGTCCCAGGGCAGCATGATCTTCACTTGTATGCCAGCACACCCTGTCTGAG  
CAACACGTGGCGGCACAAGCAGTGTCAACGTAGTAAGTTAACAGGGTCTCCGCTGTGGATC  
ATCAGGGCATCCACAACCTTCACTGATTTAGCCCTCTGTCTCGGAGTTTCCAGACACCA  
CAACCTCGCAGCCTTTGGGGCAGTCTGATGTAACCGCAGCACACCATAGCAGGCCCT  
CCGCACAAGCAAGCCCTCTAAGAAATTTGTAACCCANANACTCTGCTGGCAATGGCACAC  
AAACCTCTAGTGGACCTCGGNCGGACCAACCC

13\_16475.edit

TCGAGCGGGCGGGCGGGCAGGTCTGGTCCAGCATAGCCCTGCGAGTCTCCTACTGCTACTC  
CAGACTTGACATCATATGAATCATACTCCCGACAATAGTTCTGAGGACCAGTAGGGCATG  
ATTCACAGATTCCAGGGGGGGCAGGAGAACCAGGGGACCCTGGTTGTCTGGAATACCAG  
GGTACCAATTTCTCCCAAGGAATACCAGGAGGCCCTGGAATCTCCCTTGGGGCCTTGAGGTCC  
TTGACCAATTAGGAGGGCGAGTAGGAGCAGTTGGAGGCTGTGGGCAAACTGCACAACATTC  
TCCAAATGGAAATTTCTGGGTGGGGCAGTCTAATTTCTTGATCCGTCACATATTATGTATCG  
CAGAGAACGGATCCTGAGTCACAGACACATATTTGGCATGGTTCTGGCTTCCAGACATCTC  
TATCCGNCA TAGGACTGACCAAGATGGGAACATCCTCCTTCAACAAGCTTNTGTTGTGCC  
AAAAATAATAGTGGGATGAAGCAGACCGAGAACTANCCAGCTCCCCCTTTTGCACAAAGC  
NTCATCATGTCTAAATAATCAGACATGAGACTTCTTGGGCAAAAAAGGAGAAAAAGAAAA  
AGCAGTTCAAGTANCCNCAATCAAGTTGGTTCCTTGGCCNTTCAGCACCCGGGCCCCGTT  
ATAAAACACCTNCGGCGGGACCCCCCT

FIG. 15GG

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14\_16475.edit

AGCGTGGTCCGCGCCGAGGTGTTTTATGACGGGCGCGGTGCTGAAGGGCAGGGAACAAC  
TGATGGTGCTACTTTGAACTGCTTTTCTTTCTCTTTTGCACAAAGAGTCTCATGTCTGA  
TATTTAGACATGATGAGCTTTGTGCAAAAGGGGAGCTGGCTACTTCTCGCTCTGCTTCATC  
CCACTATTATTTTGGCACAACAGGAAGCTGTTGAAGGAGGATGTTCCCATCTTGGTCAGTC  
CTATGCGGATAGAGATGTCTGGAAGCCAGAACCATGCCAAATATGTGTCTGTGACTCAGG  
ATCCGTTCTCTGCGATGACATAATATGTGACGATCAAGAATTAGACTGCCCCAACCCAGAA  
ATTCCATTGGAGAATGTTGTGAGTTTGGCCACAGCCTCCAACTGCTCCTACTCGCCCTCC  
TAATGGTCAAGGACCTCAAGGCCCAAGGGAGATCCAGGCCCTCCTGGTATTCTGGGGAG  
AAATGGTGACCCTGGTATTCCAGGACAACCAGGGTCCCCTGGTCTCCTGGCCCCCTGGA  
ATCNGGNGAATCATGCCCTACTGGTCTCAAACCTATTCTCCANATGATTCATATGATGTC  
AAGTCTGGGATAGCNAGTANGGANGGACTCGCAGGCTATTCTGGACCANACCTGCCGGGG  
GGCGGTTCCGAAAGCCCGAATCTGCANANTNCTTCACACTGGCGGGCGTCTGAGCTGCTTT  
AAAAGGGCCATTCCNCTTTAGNGNGGGGGANTACAATTACTNGGCGGGCGTTTTANANCG  
CGNGNCTGGGAAAT

15\_16476.edit

AGCGTGGTCCGCGCCGAGGTCCACATCGGCAGGGTCCGAGCCCTGGCCGCCATACTCGAA  
CTGGAATCCATCGGTCACTCTCTGCGCAACCAGACATGCCCTCTTGTCTTGGGGTCTTGG  
TGATGTACCAGTTCTTCTGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACCAGT  
CTCCATGTTGCAGAAGACTTTGATGGCATCCAGGTTGCAGCCTTGGTTGGGGTCAATCCAG  
TACTCTCCACTCTTCCAGTCAGAGTGGCACATCTTGAGGTCACGGCAGGTGCGGGCGGGGT  
TCTTGGCGCTGCCCTCTGGGCTCCGGAATCTCGATCTGCTGCCCTCAGGCTCTTGAGGGTG  
GTGTCCACCTCGAGGTACGGTCACCGTACCAACCACATTGGCATCATCAGCCCGGTAGTAGCGGC  
CACCATCGTGAGCCTTCTCTTGAGTGGCTGGGGCAGGAACCTGAAGTCGAAACCAGCCCT  
GGGAGGACCAGGGGGACCAANAGGTCCAGGAAGGGGGCGGGGGGACCAACAGGACCAG  
CATCACCAAGTGCGACCCGCGAGAACCTGCCCGCCCGNCCGCTCGAA

16\_16476.edit

TCGAGCGNCGCCCGGGCAGGTCTCCCGGTGGCACTGGTGATGCTGGTCTCTTGGTCCCC  
CCGGCCCTCCTGGACCTCCTGGTCCCGCTGGTCTCCAGCGCTGGTTTCGACTTCAGCTTC  
CTGCCCCAGCCACCTCAAGAGAAGGCTCAGCATGGTGGCCGCTACTACCGGGCTGATGAT  
GCCAATGTGGTTCTGTGACCGTGACCTCGAGGTGGACACCACCTCAAGAGCCTGAGCCAG  
CAGATCGAGAACATCCGGAGCCCAAGAGGGCAGCCGCAAGAACCCCGCCCGCACCTGCCGT  
GACCTCAAGATGTGCCACTCTGACTGGAAGAGTGGAGAGTACTGGATTGACCCCAACCAA  
GGCTGCAACCTGGATGCCATCAAGTCTTCTGCAACATGGAGACTGGTGAGACCTGCGTGT  
ACCCCACTCAGCCCACTGTGGCCCAAGCAAGTGGTACATCAGCAAGAACCCCAAGGACA  
AGAGGCAATGTCTGTTCTGGCGGAGGCAAGCCATGGATTCCAGTTCGAGTATGGCGGCC  
AGGGCTCCACCTGCCGATGTGGACCTCCGGCCCGGACCAACCTT

FIG. 15HH

17\_16477.edit

TNGAGCGGGCGGGCGGGCAGGNTGNNAACGCTGGTCCTGCTGGTCCTCCTGGCAAGGCTG  
GTGAAGATGGTCACCCTGGAAAACCCGGACGACCTGGTGAGAGAGGAGTTGTTGGACCAC  
AGGGTGCTCGTGGTTTCCCTGGAACCTCTGGACTTCTGGCTTCAAAGGCATTAGGGGACA  
CAATGGTCTGGATGGATTGAAGGGACAGCCCGGTGCTCCTGGTGTGAAGGGTGAACCTGG  
TGCCCTGGTGAAAATGGAACCTCCAGGTCAAACAGGAGCCCGTGGGCTTCTGGTGAGAG  
AGGACCGTGTGGTGCCCTGGCCCANACCTCGGCCGCGACCACGCTAAGCCCCGAATTTCC  
AGCACACTGGNGGCCGTTACTANTGGATCCGAGCTCGGTACCAAGCTTGGCGTAATCATG  
GTCATAGCTGTTTCTGNGTGAAATTTGTTATCCGCTCACAATTCACACANCATACGAAGC  
CGGAAAGCATAAAGTGTAAGCCCTTGGGGTGCTAATGAGTGAGCTAACTCNCATTAAATT  
GCGTTGCGCTCACTGCCCCGCTTTTCCANNNGGGAAACNTGGCNTNGCCNGCTTGCNTTAA  
NTGAAATCCGCCNACCCCCGGGGAAAAGNCGGTTTGCNGTATTGGGGCNCTTTTCCCTTT  
CCTCGGNTTACTTGANTTANTGGGCTTTGGNCGNTTCGGGTTGNGGGCGANCNGGTTCAACN  
TCACNCAAAGGNGGNAANACGGTTTTCCANAATCCGGGGGNTANCCCAANGNAAAAC  
ATNNGNCNAANGGGCT

18\_16477.edit

AGCGTGGTTNGCGGCCGAGGTCTGGGCCAGGGGCACCAACACGTCTCTCTCACCAGGAA  
GCCCACGGGCTCCTGTTTGACCTGGAGTTCCATTTTACCAGGGGCACCAGGTTACCCTT  
CACACCAGGAGCACCGGGCTGTCCCTTCAATCCATNCAGACCATTTGTCNCCCCTAATGCCT  
TTGAAGCCAGGAAGTCCAGGAGTTCCAGGGAACACCGAGCACCTGTGGTCCAACAAC  
TCCTCTCTCACCAGGTCTGTCGGGTTTTCCAGGGTGACCATCTTCACCAGCCTTGCCAGGA  
GGACCAGCAGGACCAGCGTTACCAACCTGCCCCGGCGGGCGGCTCGA

21\_16479.edit

TCGAGCGGGCGGGCGGGCAGGTCCAATTTCTCCCTGACGGTCCCACTTCTCTCCAATCTTGT  
AGTTACACCAATTGTCAATGCCACCATCTAGATGAATCACAATCTGAAATGACCATTTCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTCAGACATTCGTTCCCACTCATCTCCA  
ACGGCATAATGGGAAACTGTGTAGCGGTTCAAAGCAGAGTCAATCCGTAGGTTGGTTCAAG  
CCTTCGTTGACAGAGTTGCCCACGGTAACAACCTCTTCCCGAACCTTATGCCTCTGCTGGTC  
TTTCAGTGCTCCACTATGATGTTGTAGGTGGCACCTCTGGTGAGGACCTCGGCCGCGACC  
ACGCT

22\_16479.edit

ACCGTGGTCCCGGCCGAGGTCTCACCAGAGGTGCCACCTACAACATCATAGTGGAGCCA  
CTGAAAGACCAGCAGAGGCATAAGGTTCCGGAAGAGGTTGTTACCGTGGGCAACTCTGTC  
AACGAAGGCTTGAACCAACCTACGGATGACTCTGCTTTGACCCCTACACAGTTTCCCAT  
ATGCCGTTGGAGATGAGTGGGAACCAATGCTCTGAATCAGGCTTTAAACTGTTGTGCCAGTG  
CTTAGGCTTTGGAAGTGGTCATTTCAAGATGTGATTATCTAGATGGTGCCATGACAATGG  
TGTGAACTACAAGATTGGACAGAAGTGGGACCGTCAGGGAGAAAATGGACCTGCCCGGG  
CCGGCCGCTCGA

FIG. 15II

24\_16480.edit

TCGAGCGNCGCCCCGGGCAGGTCCAGTAGTGCCTTCGGGACTGGGTTACCCCCAGGTCTG  
CGGCAGTTGTACAGCGCCAGCCCCGCTGGCCTCCAAAGCATGTGCAGGAGCAAATGGCA  
CCGAGATATTCCTTCTGCCACTGTTCTCCTACGTGGTATGTCTTCCCATCATCGTAACACGT  
TGCCTCATGAGGGTCACACTTGAAATCTCCTTTTCCGTTCCCAAGACATGTGCAGCTCATTT  
GGCTGGCTCTATAGTTTGGGGAAAGTTTGTGAAACTGTGCCACTGACCTTTACTTCCTCCT  
TCTCTACTGGAGCTTTTCGTACCTTCCACTTCTGCTGTTGGTAAAAATGGTGGATCTTCTATCA  
ATTCATTGACAGTACCCACTTCTCCC.AAACATCCAGGGAAATAGTGATTTCAGAGCGATT  
AGGAGAACCAAATATGGGGCAGAAATAAGGGGCTTTTCCACAGGTTTTCCTTTGGAGGA  
AGATTTCACTGGTGACTTTAAAAGAACTCAACAGTGTCTTCATCCCCATAGCAAAAGAA  
GAAACNGTAAATGATGGAANGCTTCTGGAGATGCCNNCATTAAAGGGACNCCCAGAACTT  
CACCATCTACAGGACCTACTTCAGTTTACANNAAGNCACATANTCTGACTCANAAAGGAC  
CC.AAGTAGCNCCATGGNCAGCACTTINAGCCTTTCCCTGGGGAAAAANTTACNTTCTTAA  
ANCCTNGGCCNNGACCCCTTAAGNCCAAATNTGGAAAAANTTCCNTNCNCTGGGGGGG  
NGTTCNACATGCNTTTNAAGGGCCCCAATTNCCCNT

25\_16481.edit

TCGAGCGGCGCGCCCCGGGCAGGTGTGCGAGTCCAGCACGGGAGGCGTGGTCTTGTAGTTGT  
TCTCCGGCTGCCCCATTGCTCTCCCACTCCACGGCGATGTGCTGGGATAGAAGCCTTTGAC  
CAGGCAGGTACAGCTGACCTGGTTCTTGGTCACTCTCCTCCCGGATGGGGGGCAGGGTGTAC  
ACCTGTGGTTCTCGGGCTGCCCTTGGCTTTGGAGATGGTTTTCTCGATGGGGGGCTGGGA  
GGGCTTTGTGGAGACCTTCCACTTGTACTCCTGCCATTACGCCAGTCTGGTGCAGGAC  
GGTGAGGACGCTGACCACACGGTACGTGCTGTTGTACTGCTCCTCCCGGGCTTTGTCTTG  
GCATTATGCACCTCCACGGCGTCCACGTACCAGTTGAACCTGACCTCAGGCTCTTCGTGGC  
TCACGTCCACCACCACGCA.TGTAACCTCAGACCTCGGCGCGGACCACGCT

26\_16481.edit

AGCGTGGTCCGCGCCCCAGGTCTCAGGTTACATGCGTGGTGGTGGACGTGACCCACGAAGA  
CCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAA  
GCGCGGGGAGGAGCAGTACAACAGCACCTACCGTGTGGTACCGTCTCACCCTCCTGCA  
CCAGGACTGGCTGAATGGCAAGGAGTACAAGTCCAAGGTCTCCAACAAGCCCTCCACG  
CCCCATCGAGAA.AACCA.TCTCCA.AAGGCCAAGGGCAAGCCCCGAGAACCACAGGTGTACA  
CCCTGCCCCCATCCCGGGAGGAGATGACCAAGAACAGGTACGCTGACCTGCCTGGTCA  
AAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGAGAGCAATGGGCACCCGGAGAACA  
ACTACAAGACCACGCCTCCCGTCTGCACTCCGACACCTGCCCCGGCGGGCGCTCGA

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TCGAGCGGCGCGCCCCGGGCAGGTGAAATGGCTCCTCGCTGACCACCCGGTGTCTGGTGGTGG  
GTACAGAGCTCCGATGGGTGAAACCAATTGACATAGAGACTGTCCCTGTCCAGGGTGTAGG  
GGCCAGCTCAGTGATGCCGTGGGTACGCTGGCTCAGCTTCCAGTACAGCCGCTCTCTGTC  
CAGTCCAGGGCTTTTGGGCTCAGGACCATGGGTGCAGACAGCATCCACTCTGGTGGCTGC  
CCCATCCTTCTCAGGCCCTGACCAAGGTCACTCTGCAACCAGAGTACAGAGCTGACACT  
GGTGTCTTGAACAAGGCCATAAGCAGACCTGAAGGACACCTCGGCGCGGACCACGCT

FIG. 15JJ

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AGCGTGGTCCGCGGCCGAGGTGTCCTTCAGGGTCTGCTTATGCCCTTGTTCAAGAACACCAG  
TGTCAGCTCTCTGTACTCTGGTTGCAGACTGACCTTGCTCAGGCCTGAGAAGGATGGGGCA  
GCCACCAGAGTGGATGCTGTCTGCACCCATCGTCTGACCCCAAAGCCCTGGACTGGACA  
GAGAGCGGTGTACTGGAAGCTGAGCCAGCTGACCCACGGCATCACTGAGCTGGGCCCCCT  
ACACCTGGACAGGGACAGTCTCTATGTCAATGGTTTCACCCATCGGAGCTCTGTACCCAC  
CACCAGCACCGGGGTGGTCAGCGAGGAGCCATTCAACCTGCCCGGGCGGCCGCTCGA

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AGCGTGGTCCGCGGCCGAGGTCTGTCAGAGTGGCACTGGTAGAAGTTCCAGGAACCCTGA  
ACTGTAAGGGTTCTTCATCAGTGCCAAACAGGATGACATGAAATGATGTACTCAGAAAGTGTC  
CTGGAATGGGGCCCATGAGATGGTTGTCTGAGAGAGAGCTTCTTGCTCTACATTCCGGCGGG  
TATGGTCTTGGCCTATGCCCTTATGGGGGTGCGGTTGTGGGCGGTGTGGTCCGCCTAAAC  
CATGTTCTCAAGATCATTTGTTGCCCAACACTGGGTTGCTGACCAGAAGTGCCAGGAAG  
CTGAATACCATTTCAGTGTCAATCCAGGGTGGGTGACGAAAGGGGTCTTTTGAAGTGTG  
GAAGGAACATCCAAGATCTCTGGTCCATGAAGATTGGGGTGTGGAAGGGTTACCAGTTGG  
GGAAGCTCGTCTGTCTTTTCTTCCAAATCAGGGGCTCGCTCTTCTGATTATCTTCAGGGC  
AATGACATAAATTGTATATTCGGTCCCGGTTCCAGGCCAGTAATAGTAGCCTCTGTGACAC  
CAGGGCGGGGGCCGAGGGACCTTCTCTTGAAGAGAGACCAGCTTCTCATACTTGATGATGA  
GNCCGGTAATCTGGCACGTGNGGTTGCATGATNCCACCAAGGAAATNGGNGGGGGNG  
GACCTGCCCGGGGGCGGTTCCNAAGGCCAAATCCACACACTTGGNGGCGGTACTATGGATC  
CCTCNGTCCAACCTTGGNGGAATATGGCATAACTTTT

31\_16484.edit

TCGAGCGGGCGGGCGGGCAGGTCTTTCAGCTTTCAGCAAGTGGGAAGGTGTAATCCGTCT  
CCACAGACAAGGGCCAGGACTCGTTTGTACCGGTTGATGATAGAATGGGGTACTGATGCAA  
CAGTTGGGTAGCCAATCTGCAGACAGACACTGCCAACATTCGGGACACCCCTCCAGGAAGC  
GAGAATGCAGAGTTTCTCTGTGATATCAAGCACTTCAGGGTTGTAGATGCTGCCATTGTC  
GAACACCTGCTGGATGACCAGGCCAAAGGAGAAGGGGGAGATGTTGAGCATGTTACGCAG  
CGTGGCTTCGCTGCTGCCACTTGTCTCAGTCTTGATCAGACCTCGGGCGGGACCAAGCT

3\_16487.edit

AGCGTGGTCCGCGGCCGAGGTCTGTCTACAGTCTCAGGACTCTACTCCCTCAGCAGCGTG  
GTGACCGTGCCCTCCAGCAACTTCGGCACCCAGACCTACACCTGCAACGTAGATCACAAGC  
CCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCCAAATCTTGTGACAAAACCTCACACAT  
GCCCCCGTGGCCAGCACCTGAACTCTGGGGGACCGTCAGTCTTCTTCCCCCGCAT  
CCCCCTTCCAAACCTGCCCGGGGGGGGGCTCG

FIG. 15KK

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TCGAGCGGCCGCCCGGGCAGGTCCACATCGGCAGGGTCGGAGCCCTGGCCGGCCATACTCG  
AACTGGAATCCATCGGTCACTCTCTCGCCGAACCAGACATGCCTCTTGTCTTGGGGTTCT  
TGCTGATGTACCACTTCTTCTCGGCCACACTGGCCTGAGTGGGGTACACGCAGGTCTCACC  
AGTCTCCATGTTGCAGAAGACTTTGATGGCATCCAGGTTCAGCCTTGGTTGGGGTCAATC  
CAGTACTCTCCACTCTTCCAGTCAGAGTGGCACATCTTGAGGTCACGGCAGGTGCGGGCGG  
GGTTCTTGACCTCGGCCCGGACCACGCT

FIG. 15LL

477.



[illegible]

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FIG. 15.MM

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TCGAGCGGCCGCCCGGGCAGGTCACTTTTGGTTTTTGGTCATGTTGGTTGGTCAAAGATA  
AAAATAAGTTTGAGAGATGAATGCAAAGGAAAAAATATTTTCAAAGTCCATGTGAAA  
TTGTCTCCCATTTTTTGGCTTTTGAGGGGGTTCAGTTTGGGTGGCTTGTCTGTTTCCGGGT  
GGGGGAAAGTTGGTTGGTGGGAGGGAGCCAGGTTGGGATGGAGGGAGTTTACAGGAA  
GCAGACAGGGCCAACGTCC

55\_16496.edit

ACCGTGGTCGCGGCCGAGGTCTCACCAGAGGTGCCACCTACAACATCATAGTGGAGGCA  
CTGAAAGACCAGCAGAGGCATAAGGTTGCGGAAGAGGTTGTTACCGTGGGCAACTCTGTC  
AACGAAGGCTTGAACCAACCTACGGATGACTCGTGCTTGACCCCTACACAGTTTCCCAT  
ATGCCGTTGGAGATGAGTGGGAACGAATGTCTGAATCAGGCTTTAACTGTTGTGCCAGTG  
CTTAGGCTTTGGAAGTGGTCATTTAGATGTGATTTCATCTAGATGGTGGCATGACAATGGT  
GTGAATAACAAGATTGGAGAGAAGTGGGACCGTCAGGGAGAAAATGGACCTGCCCCGGGC  
GGCCGCTCGA

56\_16496.edit

TCGAGCGGCCGCCCGGCCAGGTCCAATTTCTCCCTGACGGTCCCATTCTCTCCAATCTTGT  
AGTTCACACCAATTGTCAAGCACCATCTAGATGAATCACATCTGAAATGACCACTTCCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTGAGACATTCGTTCCCACTCATCTCCA  
ACGCCATAATGGGAAAAGTGTGTACGGGTCAAAGCAGGATCATCCGTAGGTTGGTTCAAG  
CCTTCGTTGACAGAGTTGCCACCGTAACAACCTCTCCCGAACCTTATGCCCTCTGCTGGTC  
TTTCAGTGCCTCCACTATGATGTTGTAGGTGGCACCTCTGGTGAGGACCTCGGCCGCGACC  
ACGCT

59\_16498.edit

TCGAGCGGCCGCCCGGCCAGGTCCACCATAAGTCTCTGATACAACCACGGATGACCTGTCA  
GGACCAAGGTTGATTTCTTTCAATGGTCCGGTCTTCTCCTTGGGGGTCACCCGCACCTCGATA  
TCCAGTGAGCTGAACATTCGCTGCTGTCCACTGGCGGCTCAGGCTTGTGGGTGTGACCTGA  
GTGAACCTCAGGTCACTTGGTCCAGGAATAGTGGTACTGCACTGTGAACCAGAGGCTGA  
CTCTCTCCGCTTGGATTCTGAGCATAGACACTAACCACATACTCCACTGTGGGCTGCAAGC  
CTTCAATAGTCATTTCTGTTGATCTGGACCTGCAGTTTATGTTTGTGGTCTGGTCCAT  
TTTTGGGAGTGGTGGTACTCTGTAACCAAGTAACAGGGGAACCTGAAGGCAGCCACTTGAC  
ACTAATGCTGTTGTCTGACATCGGTCACTTGCATCTGGGATGGTTTGNCAATTTCTGTTT  
GGTAATTAATGGAAATGGCTTGGTCTTGGCGGGCTGTCTCCACGGCCAGTGACAGCATA  
CACAGNGATGCNATNATCAACTCCAAGTTAAGGCCCTGATGGTAACTTTAACTTGCTCC  
CAGCCAGNGAACTTCCGGACAGGTAATTTCTTCTGGTTTTCCGAAAGNGANCCTGGAAATN  
TCTCCTTGGANCAGAGGANCNTCCAAAACCTTGGCCCGGAACCCCTT

FIG. 15N

0001301 081000

at

AGCGTGGTCCGGGCGGAGGTCTGTACAGTGGCACTGGTAGAAGTTCCAGGAACCCTGA  
 ACTGTAAGGGTTCTTCATCAGTGCCAAACAGGATGACATGAAATGATGTACTCAGAAAGTGTC  
 CTGGAATGGGGCCCATGAGATGGTTGTCTGAGAGAGAGCTTCTGTCTACATTGGGCGGG  
 TATGGTCTTGGCCTATGCCTTATGGGGGTGGCCGTTGTGGGCGGTGTGGTCCGCCTAAAAC  
 CATGTTCTCAAAGATCAATTTGTGCCCAACACTGGGTTGCTGACCAGAAGTGCCAGGAAG  
 CTGAATACCATTTCAGTGTATACCCAGGGTGGGTGACGAAAGGGGTCTTTGAACTGTG  
 GAAGGAACATCCAAGATCTCTGGTCCAATGAAGATTGGGGTGTGGAAGGGTTACCAGTTGG  
 GGAAGCTCGTCTGTCTTTTTCCTTCCAATCAGGGGCTCGCTCTTCTGATTATTCTTCAGGGC  
 AATGACATAAAATTGTATATTCCGTTCCCGGTTCCAGGCCAGTAATAGTAGCCTCTTGTGAC  
 ACCAGGCGGGGCCCCANGGACCACTTCTCTGGGANGAGACCCAGCTTCTCATCTTGATGAT  
 GTAACCCGGTAATCCTGCACTGGCGGCTGNCATGATACCANCAAGGAATTGGGTGNGGN  
 GGACCTGCCCCGGCGGCCCTCNA

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AGCGTGGTCCGGGCGGAGGTCTGGGATGCTCCTGCTGTACAGTGGAGATATTACAGGATC  
 ACTTACGGAGAAACAGGAGGAAATAGCCCTGTCCAGGAGTTCACTGTGCCTGGGAGCAAG  
 TCTACAGCTACCATCAGCGGCCCTTAAACCTGGAGTTGATTATACCATCACTGTGTATGCTG  
 TCACTGGCGGTGGAGACAGCCCCGCAAGCAGCAAGCCAATTTCCATTAATTACCGAACAG  
 AAATTGACAAACCATCCCAGATGCAAGTGACCGATGTTACAGGACAACAGCAATTAGTGTC  
 AGTGGCTGCCTTCAAGTTCCCGTGTACTGGTTACAGAGTAACCACCACTCCCAAAAAATGG  
 ACCAGGACCAACAAAACTAAACTGCAAGGTCCAGATCAACAGAAATGACTATTGAAG  
 GCTTGCAGCCACAGTGGAGTATGTGCTTAGTGTCTATGCTCAGAAATCCAAGCGGAGAGA  
 GTCAGCCTCTGCTTCACTGCACTAAACCACTATTGCTGCACCAACTGACCTGAAGTTAC  
 TCAGGTACACCCACAAGCTTGACCGCGGAGTGGACACCACCAATGTTCACTCACTGGAT  
 ATCGAGTGGGGGTGACCCCGAAGGAGAGACCCCGACCCATGAAAGAAATCAACCTTGCT  
 CCTGACAGCTCATCCNCGGTGTATGAGGACTTATGGGGGACTGCCCCCGCNGGCCGNTC  
 GAAACGAATTNTGAAATTCCTTNCACCTGGCGGCGNTTCGAGCTTCTTNTANANGCC  
 CCAATTCNCTNTAGNCGGTGCTN

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AGCGTGGTCCGGGCGGAGGTCTNAGGA

62\_16483.edit

TCGAGCGGCGCGCGCGGCGGAGGTCCACCCACCCCAATTCCTTGCTGGTATCATGGCAGCCGC  
 CACGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAGCCTGGGTCTCCTCCAGAGA  
 AGTGGTCCCTCGGGCGCGCGGCTGCTGTACAGAGGCTACTATTACTGGCCTGGAACCGGA  
 ACCGAATATACAAATTTATGTCAATGCGCTGAGAAATAATCAGAAGACCGAGCCCTGATTG  
 GAAGGAAAAAGACACAGGAGCTTCCCAACTGGTAACCCCTCCACACCCCAATCTTCAATG  
 GACCAGAGATCTTGGATGTTCTTCCACAGTTCAAAAGACCCCTTTCGTACCCACCCTGG  
 GTATGACACTGGAAATGGTATTCAGCTTCTGCGCACTTCTGGTCAGCAACCCAGTGTGGG  
 CAACAAATGATCTTTCAGGAACAATGGTTTACGGCGGACCACACCGCCCAACACCGGCACC  
 CCCATAAGGNATAGGCCAAGACCATACCCCGCGGAATGTAGGACAAGAAGCTCTNTCTCA  
 ACAACCATCTCATGGCCCCCATTCAGGACACTTCTGAGTACATCAATTCATGTCACTCTG  
 GTGGGCACTTGATGAANAACCTTACAGTTCAAGGTTCTTGGAACTTCTACCAGNGCCACT  
 TCTGACAGGANCTTGGGCGNGACCACTT

FIG. 1500

63\_16500.edit

AGCGTGGTTCGGCGCCGAGGTCCATTTTCTCCCTGACGGTCCCACTTCTCTCCAATCTTG TAG  
TTCACACCATTGTCATGGCACCATCTAGATGAATCACATCTGAAATGACCACTTCCAAAGC  
CTAAGCACTGGCACAACAGTTTAAAGCCTGATTCAGACATTCGTTCCCACTCATCTCCAAC  
GGCATAATGGGAACTGTGTAGGGGTCAAAGCACGAGTCATCCGTAGGTTGGTTCAAGCC  
TTCGTTGACAGAGTTGCCCACGGTAACAACCTCTTCCCGAACCTTATGCCTCTGCTGGTCTT  
TCACTGCCTCCACTATGATGTTGTAGGTGGCACCTCTGGTGAGGACCTGCCCCGGGCGGCC  
GCTCGA

64\_16493.edit

AGCGTGGTTCGGCGCCGAGGTGTGCCCCAGACCAGGAATTCGGCTTCGACGTTGGCCCTGTC  
TGCTTCTGTAAACTCCCTCCATCCCAACCTGGCTCCCTCCCAACCAACCAACTTTCCCCC  
AACCCGGAACAGACAAGCAACCCAACTGAACCCCTCAAAAGCCAAAAAATGGGAG  
ACAATTCACATGGACTTTGGAAAAATATTTTTCCTTTGCATTCTCTCAAACCTTAGTT  
TTTATCTTTGACCAACCGAACATGACCAAAAAACCAAAAGTGACCTGCCCCGGGCGGCCGCTC  
GA

64\_16500.edit

TCGAGCGCGCGCGCGCGGCGAGGTCTCACCAGAGGTGCCACCTACAACATCATAGTGGAGG  
CACTGAAAGACCAGCAGAGGCATAAGCTTCGGGAAGAGGTTGTTACCGTGGGCAACTCTG  
TCAACGAAGGCTTGAACCAACCTACCGATGACTCGTGCTTTGACCCCTACACAGTTTCCCA  
TTATGCCGTTGGAGATGAGTGGGAACGAATGTCTGAATCAGGCTTTAAACTGTTGTGCCAG  
TGCTTAGGCTTTGGAAAGTGGTCAATTCAGATGTGATTATCTAGATGGTGCCATGACAATG  
GTGTCAACTACAAGATTGGAGAGAAGTGGGACCGTCAGGGAGAAAATGGACCTCGGCGC  
CGACCACGCT

FIG. 15PP

0052501.001000

16501.edit

TCGAGCGGGCCCGGGCAGGTACCGGGGTGGTCAGCGAGGAGCCATTCACACTGAACTT  
CACCATCAACAACCTGCGGTATGAGGAGAACATGCAGCACCTGGCTCCAGGAAGTTCAA  
CACCACGGAGAGGGTCCTTCAGGGCCTGCTCAGGTCCCTGTTCAAGAGCACCAGTGTGGC  
CCTCTGTACTCTGGCTGCAGACTGACTTTGCTCAGACCTGAGAAACATGGGGCAGCCACTG  
GAGTGGACGCCATCTGCACCCTCCGCCTTGATCCCACTGGTACTGGACTGGACANANAGCG  
GCTATACTTGGGAGCTGANCCNAACCTTTGGCGNGACNCCNTT

16501.2.edit

GAGGACTGGCTCAGTCCCAGTATAGCCGCTCTCTGTCCAGTCCAGGACCAGTGGGATCAA  
GGCGGAGGGTGCAGATGGCGTCCACTCCAGTGGCTGCCCCATGTTTCTCAAGTCTGAGCAA  
AGNCAGTCTGCAGCCAGAGTACAGAGGGCCAACTGGTGGCTCTTGAACAGGGACCTGAG  
CAGGCCCTGAAGGACCCTCTCCGTGGTGTGAACTTCTGGAGCCAGGGTGGTGCATGTTT  
TCCTCATACCGCAGGTGTGATGGTGAAGTTTCAGTGTGAATGGCTCCTCGCTGACCACCC

16502.1.edit

AGCGTGGTCCGGGGCGAGGTCCACCACACCCAAATTCCTTGGTGGTATCATGGCAGCCGCCA  
CGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAGCCTGGGTCTCCTCCCAGAGAA  
GTGGTCCCTCGGGCCCCCGCTGGTGTACAGAGGCTACTATTACTGGCCTGGAACCGGGAA  
CCGAATATACAATTTATGTCAATGGCCTGAAGAATAATCAGAAAGAGCGAGCCCTGATTGG  
AAGGAAAAGACAGACGAGCTTCCCCAACTGGTAACCTTCCACACCCCAATCTTTCATGG  
ACCANANANCTTGGATNGTCTTTCACTNGGTTNAAAAAACCTTTTCGGCCCCCCCCACCTTG  
GGGATTAACTTGGGAAANGCGGATTNACCTTCC

16502.2.edit

TCGAGCGGGCCCGGGCCAGGTCCCTGTACAGTGGCACTGGTAGAAGTTCCAGGAACCCT  
GAACTGTAAGGGTTCTTCATCACTGCCAACAGGATGACATGAAATGATGTACTCAGAAGT  
GTCTTGGAATGGGGCCCATGAGATGGTGTCTGAGAGAGACCTTCTTGTCTACATTCCGC  
GGGTATGGTCTTGGCCTATCCCTTATGCGGGTGGCCGTTGTGGGCGGTGTGGTCCGCCTAA  
AACCATGTTCTCAAAGATCATTTGTTGCCCAACACTGGGTTCCTGACCAGAAGTGCCAGG  
AAGCTGAATACCATTTCCAGTGTATACCCAGCGNGGGTGACCAAAGGGGGTCTNTTNGA  
CCTGGNGAAAGGAACCATCCAAAANCTCTGNCCTATG

FIG. 15QQ

16503.1.edit

AGCGTGGNCGCGGCCGAGGTCTGAGGATGTAAACTCTTCCCAGGGGAAGGCTGAAGTGCT  
GACCATGGTGCTACTGGGTCTTCTGAGTCAGATATGTGACTGATGNGAACTGAAGTAGGT  
ACTGTAGATGGTGAAGTCTGGGTGTCCCTAAATGCTGCATCTCCAGAGCCTTCCATCATT  
CCGTTTCTTCTTTGCTATGGGATGAGACACTGTTGAGTATTCTCTAAAGTCACCACTGAAA  
TCTTCTCCAAAGGAAAACCTGTGGAAAAGCCCCTATTCTGCCCCATAATTGGTTCTCC  
TAATCNCTCTGAAATCACTATTTCCCTGGAANGTTGGGAAAAANNGGCNACCTGNCAN  
TGGAAANTGGATANAAAGATCCCACCATTTTACCCAACNAGCAGAAAGTGGGAANGGTAC  
CGAAAAGCTCCAAGTAANAAAAAGGAGGGAAGTAAAGGTCAAGTGGGCACCAGTTTCAA  
ACAAAACCTTTCCCCAACTATANAACCCA

16503.2.edit

AAGCGGCCGCCCCGGGCAGGNNCAGNAGTGCTTGGGACTGGGNTCACCCCCAGGTCTGC  
GGCAGTTGTACAGCGCCAGCCCCGCTGGCCTCAAAGCATGTGCAGGAGCAAATGGCAC  
CGAGATATTCCTTCTGCCACTGTTCTCTACGTGGTATGTCTTCCCATCATCGTAACACGTT  
GCCTCATGAGGGTCACACTTGAAATCTCTTTCCGTTCCCAAGACATGTGCAGCTCATTG  
GCTGGCTCTATAGTTTGGGGAAAGTTTGTGAAACTGTGCCACTGACCTTTACTTCTCTCT  
CTCTACTGGAGCTTTCCGTACCTTCCACTTCTGCTGNTGGNAAAAAGGGNNGGAACNTCTTA  
TCAATTTCAATTGGACAGTANCCCNCTTCTNCCCAAAACATNCAAGGGAAAAATATTGATTN  
CNAGAGCGGATTAAGGAACAACCCNAATTATGGGGGCCAGAAATAAAGGGGGCTTTTCCA  
CAGGTNTTTTCT

16504.1.edit

TCGAGCGGCCGCCCCGGGCAGGTCTGCAGGCTATTGTAAGTGTCTGAGCACATATGAGAT  
AACCTGGGCCAAAGCTATGATGTTCCATACGTTAGGTGTATTAAATGCCACTTTTACTGCCA  
TCTCAGTGGATGACAGCCTTCTCACTGACAGCAGAGATCTTCTCACTGTGCCAGTGGGCA  
GGAGAAAGAGCATGCTGCCACTGGACCTCGGCCGCGACCAAGCT

16504.2.edit

AGCGTGGTCCGCGGCCGAGGTCCAGTCCAGCATGCTCTTCTCTCTGCCC.ACTGGCACAGTG  
AGGAAGATCTCTGCTGT.CAGTGACAAGGCTGT.CATCCACTGAGATGGCAGTCAAAAAGTGC  
ATTTAATACACCTAACGTATCGAACATCATAGCTTGGCCCCAGGTTATCTCATATGTGCTCA  
GAACACTTACAATAGCCTCCAGACCTGCCCCGGGCGGCCGCTCGA

FIG. 15RR

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16506.2.edit

FIG. 15SS

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16507.2edit

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FIG. 15TT



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ACCGTGGTCCGGCCGAGGTCTGGGATGCTCCTGCTGTACAGTGAGATATTACAGGATC  
ACTTACGGAGAAAACAGGAGGAAATAGCCCTGTCCAGGAGTTCAGTGTGCCTGGGAGCAAG  
TCTACAGCTACCATCAGCGGCCTTAAACCTGGAGTTGATTATACCATCACTGTGTATGCTG  
TCACTGGCCGTGGAGACAGCCCCGCAAGCAGCAAGCCAATTTCCATTAATTACCGAACAG  
AAATTGACAAACCATCCCAGATGCAAGTGACCGATGTTTACAGACAACAGCATTAGTGTC  
AGTGGCTGCCTTCAAGTTCCCTGTTACTGGTTACAGAAGTAACCACCCTCCCAAAAATG  
GACCAGGACCAACAAAACCTAAACTGACAGGTCCAGATCAAACAGAAAATGGACTATTG  
AAGGCTTGACGCCACAGTGGAGTATGTGGNTAGGNGTCTATGCTCAGAATCCCAAGCC  
GGAGAAAGTCAGCCTTCTGGTTTAGACTGCAGTAACCAACATTGATCGCCCTAAAGGACT  
GGNCATTCACTTGGATGGTGGATGTCCAATTC

16509.2.edit

TCGAGCGGGCCCGCCGGCCAGGTCTTGCAGCTCTGCAGNGTCTTCTTCACCATCAGGTGCA  
GGGAATAGCTCATGGATTCCATCCTCAGGGCTCGAGTAGGTACCCCTGTACCTGGAAACTT  
GCCCCTGTGGGCTTTCCCAAGCAATTTTGATGGAATCGACATCCACATCAGNGAATGCCAG  
TCCTTTAGGGCGATCAATGTTGGTTACTGCAGTCTGAACCAGAGGCTGACTCTCTCCGCTT  
GGATTCTGAGCATAGACACTAACCACATACTCCACTGTGGGCTGCAAGCCTTCAATAGTCA  
TTTCTGTTTGATCTGGACCTGCAGTTTAAAGTTTGGTGGTCTGNCCCATTTTTGGGAAG  
TGGGGCGTTACTCTGTAACCACTAACAGGGGAACCTTGAAGGCAGCCACTTGACACTAATG  
CTGTTGCTCTGAACATCCGCTCACTTGCATCTGGGATGGTTTGACAATTTCTCGTTCGGCA  
AATTAATGGAAATGGCTTCTGCTTCCCGGGCTGNCTCCACGGGCCAGTGACAGCATA  
C

16510.1.edit

TCGAGCGGGCCCGCCGGCCAGGTCTTGCAGCTCTGCAGTGTCTTCTTCACCATCAGGTGCA  
GGGAATAGCTCATGGATTCCATCCTCAGGGCTCGAGTAGGTACCCCTGTACCTGGAAACTT  
GCCCCTGTGGGCTTTCCCAAGCAATTTTGATGGAATCGACATCCACATCAGTGAATGCCAG  
TCCTTTAGGGCGATCAATGTTGGTTACTGCAGTCTGAACCAGAGGCTGACTCTCTCCGCTT  
GGATTCTGAGCATAGACACTAACCACATACTCCACTGTGGGCTGCAAGCCTTCAATAGTCA  
TTTCTGTTTGATCTGGACCTGCAGTTTAAAGTTTGGTGGTCTGNCCCATTTTTGGGGAA  
GGGCTGGTTACTCTGTAAACCACTAACAGGGGAACCTTGAAGGCAGCCACTTGACACTAATG  
CTGGTGGCCTGAACATCCGCTCACTTGCATCTGGGATGGTTTGGTCAATTTCTGTTCCGTAAT  
TAATGGGAAATGGCTTACTGGCTTCCCGGGCTGTCTCCACGGNCAGTGACAAGCATAC  
ACAGGNGATGGGTATAATCAACTCCAGGTTAAGGCCNCTGATGGTA

16510.2.edit

ACCGTGGTCCGGCCGAGGTCTGGGATGCTCCTGCTGTACAGTGAGATATTACAGGATC  
ACTTACGGAGAAAACAGGAGGAAATAGCCCTGTCCAGGAGTTCAGTGTGCCTGGGAGCAAG  
TCTACAGCTACCATCAGCGGCCTTAAACCTGGAGTTGATTATACCATCACTGTGTATGCTG  
TCACTGGCCGTGGAGACAGCCCCGCAAGCAGTAAGCCAATTTCCATTAATTACCGAACAG  
AAATTGACAAACCATCCCAGATGCAAGTGACCGATGTTTACAGACAACAGCATTAGTGTC  
AGTGGCTGCCTTCAAGTTCCCTGTTACTGGTTACAGAGTAACCACCCTCCCAAAAATGG  
GACCAGGACCAACAAAAACTAAACTGCANCGTCCAGATCAAACAGAAAATGACTATTG  
AAGCCTTGACGCCACAGTGGAGTATGTGGTTAGTGTCTATGCTCAGAAATNCCAAGCGG  
AGAGAGTCAGCCTCTGGTTACAGCT

FIG. 15UU

16511.1.edit

TCGAGCGGCGCCCGGGCAGGTACGGCTCTCAGGACGTACCAACCATGGCCTGGGCTCT  
GCTCCTCCTCACCCTCCTCACTCAGGGGCACAGGGTCTGGGCCCAGTCTGCCCTGACTCAG  
CCTCCCTCCGCGTCCGGGTCTCCTGGACAGTCAGTCACCATCTCCTGCACTGGAACCAGCA  
GTGACGTTGGTGCTTATGAATTTGTCTCCTGGTACCAACAACACCCAGGCAAGGCCCCAA  
ATCATGATTTCTGAGGTCACTAAGCGGCCCTCAGGGGTCCCTGATCGCTTCTCTGGCTCC  
AAGTCTGGCAACACGGCCTCCCTGACCGTCTCTGGGCTCCANGCTGAGGATGANGCTGATT  
ATTACTGGAAGCTCATATGCAGGCAACAACAATTGGGTGTTCCGGCGGAAGGGACCAAGCT  
GACCGTNTAAGGTCAAGCCCAAGGCTTGCCCCCTCGGTCACTCTGTTCCACCCCTCCTCT  
GAAGAAGCTTTCAAGCCAACAANGNCACACTGGGTGTGTCTCATAAGTGGACTTTCTACCC

16511.2.edit

AGCGTGGTCCGGGCCGAGGTCTGTAGCTTCTGTGGGACTTCCACTGCTCAGGCGTCAGGCT  
CAGGTAGCTGCTGGCCGCGTACTTGTGTGTGCTTGTNTGGAGGGTGTGGTGGTCTCCACT  
CCCGCCTTGACGGGGCTGCTATCTGCCCTTCCAGGCCACTGTCACGGCTCCCGGGTAGAAGT  
CACTTATGAGACACACCAGTGTGGCCTTGTGGCTTGAAGCTCCTCAGAGGAGGGTGGGA  
ACAGAGTGACCGAGGGGCCAGCCTTGGCCTGACCTAGGACGGTCAGCTTGGTCCCTCCCG  
CGAACACCCAAATTGTGTGTGCTGCTATGAGCTGCAGTAATAATCAGCCTCATCCTCAGC  
CTGGAGCCCAGAGACNGTCAACCGAGGCCCGTGTGTTGCCAAGACTTGGAGGCCAGANAAG  
CGATCAGGGACCCCTGAGGGGCCGCTTACNGACCTCAAAAAATCATGAATTTGGGGGGCC  
TTTGCTGGGNGTTGGTTGGTNACCAAGAAAAACAAAATTCATAAAGCACCAACGTCACT  
GCTGGTTTCCAGTGCANGAANATGGTCAACTGAANTGTCC

16512.1.edit

AGCGTGGTCCGGGCCGAGGTCCAGCATCAGGAGCCCCGCTTGCCGGCTCTGGTCACTGCC  
TTTCTTTTGTGGCCTGAACCGATGTCATCAATTCGCACTAGCAGAACTGCCGTCTCCACTG  
CTGTCTTATAAGTCTGCAGCTTCACAGCCAAATGGCTCCCATATGCCCAAGTTCCTTCATGTCC  
ACCAAAGTACCCGTCTCACCATTACACCCCAAGGTCTCACAGTTCTCCTGGGTGTGCTTGG  
CCCGAAGGGAGGTAAGTANACGGATGGTCTGCTGCCACAGTTCTGGATCAGGGTACGAG  
GAATGACCTCTAGGGCCTCGGCNACAAACCCCTGTATGGACCTGCCCGGGCGGGCCGCTC  
GA

16512.2.edit

TCGAGCGGCGCCCGGGCAGGTCCATACAGGGCTGTTGCCAGGCCCTAGAGGNCATTCC  
TTGTACCCCTGATCCAGAACTGTGGGACCAACCATCCGTCTACTTACCTCCCTTCGGGCC  
AAGCACACCCAGGAGAACTGTGAGACCTGGCGTGTAAATGGNGAGACGGGTACTTTGGTG  
GACATGAAGGAACCTGGCCATATGGGAGCCATTGGCTGNGAACCTGCANACTTATAAGACA  
GCAGTGGAGACGGCAGTTCTCCTACTGCCAATTGATGACATCGTTTACGGCCACAAAAAG  
AAAGGCGATGACCANACCCCGCAAGCCCGCGCTTCTGATGCTGGACCTCGGCCCGCCGAC  
CATGCTT

FIG. 15VV

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16514.1.edit

AGCGTGGTCCGCGCCGAGGTCCACTAGAGGTCTGTGTGCCATTGCCAGGCAGAGTCTCTG  
CGTTACAACTCCTAGGAGGGCTTGCTGTGCGGAGGGCTGCTATGGTGTGCTGCGGTTCA  
TCATGGAGAGTGGGGCCAAAGGCTGCGAGGTTGTGGTGTCTGGGAACTCCGAGGACAGA  
GGGCTAAATCCATGAAGTTTGTGGATGGCCTGATGATCCACAGCGGAGACCCTGTAACTA  
CTACGTTGACACTGCTGTGCGCCACGTGTTGCTCANACAGGGTGTGCTGGGCATCAAGGTG  
AAGATCATGCTGCCCTGGGACCCANCTGGCAAAAATGGCCCTTAAAAACCCCTTGCCNTG  
ACCACGTGAACCATTGTGNGAACCCCAAGATGAANATACTTGCCACCACCCCCCATTC

16514.2.edit

TCGAGCGGCGCCCGGGCAGGTCTGCCAAGGAGACCCTGTTATGCTGTGGGGACTGGCTG  
GGGCATGGCAGGCGGCTCTGGCTTCCCACCTTCTGTTCTGAGATGGGGGTGGTGGGCAGT  
ATCTCATCTTTGGGTTCCACAATGCTCAGTGGTCAGGCAGGGGCTTCTTAGGGCCAATCT  
TACCAGTTGGGTCCCAGGGCAGCATGATCTTACCTTGATGCCAGCACACCCTGTCTGAG  
CAACACGTGGCGCACAGCAGTGTCAACGTAGTAGTTAACAGGGTCTCCGCTGTGGATCAT  
CAGGCCATCCACAACTTTCATGGATTAGCCCTCTGTCTCGGAGTTTCCCAAAACACCAC  
AACCTCGCCAGCCTTTGGGCCCCACTTCTCATGAATGAAACCGCAGCACACCAATTANCAA  
GGCCCTTCCGCACAGGNAACCCCTTCCGAAGGAGTTTGTAAACGCCAAAAAATCTTGCCT  
GGGGCAATGGGCACACAGACCTNTANTNGGACCTTGGNCCGCGAACCCACCGCTT

16515.1.edit

AGCGTGGTCCGCGCCGAGGTCTGCGCCCTCTGSCAAGGCTGCTGAAGATGGTCAACCCTGG  
AAAACCCCGACGACCTCGTGAGAGAGGAGTTGTTGGACCACAGGGTGCTCGTGGTTTCCC  
TGGAACCTCCTGGAATTCCTGGCTTCAAAGGCAATTAGGGGACACAATGGTCTGGATGGATTG  
AAGGCACAGCCCGGTGCTCCTGGTGTGAAGGGTGAACCTGCGNCCCTTGGTGAAAATGGA  
ACTCCAGGTCAAACAGGAGCCCGGCGGCTTCTGCGNAGACAGGACGTGTTGGTCCCCCT  
GGCCCANACCTGCCCCGGCCCGGCGCTCAAAAAGCCGAAATCCAGNACACTGGCGGCGGNT  
ACTANTGGAATCCGAACCTTCCGTACCAAAAGCTTGGCCGTAATCATGGCCATAGCTTGTTC  
CTGGGNGGCAAAATGGTATTCCGCTTCCAAATCCACACAACATACCGAACC CGGAAAGCA  
TTAAAGTGTA AAAAGCCTTGGGGGGGCTAAATGANGTGAGCNTAACTCNCATTTAAATGG  
CGTTGCGCTTCACTGCCCCGCTTTCCAGTCCGCGNA

16515.2.edit

TCGATCCGCGCCCGCCCGGGCAGGTCTGCGCCAGGGGCCACCAACACGTCTCTCACCAGGA  
AGCCCCACGGGCTCCTGTTTGACCTGGAGTTCCAATTTACCAGGGGCACCAGGTTACCCCT  
TCACACCAGGAGCACCGGGCTGTCCCTTCAATCCATCCAGACCAATTGTGNCCTTAATGCC  
TTTGAAGCCAGGAAGTCCAGGAGTTCCAGGGAACCACGAGCACCTGTGGTCCAACAAC  
TCCTCTCTCACCAGGTGCTCCGGGTTTTCCAGGTCACCATCTTACCAGCCTTGCCAGGA  
GGGCCAGACCTCGGCGCGGACCAAGCT

FIG. 15WW

09636301.061000

46

16516.1.edit

ANCGTGGTCGCGGCCGAGGTCTCACCAGAGGTGNCACCTACAACATCATAGTGGAGGCA  
CTGAAAGACC.ANCAGAGGCATAAGGTTCCGGGAAGAGG

16516.2.edit

TCGAGCGGCCGCCCCGGGCAGGTCCATTTTCTCCCTGACGGTCCCACTTCTCTCCAATCTTGT  
AGTTCACACCAATTGTCATGGCACCATCTAGATGAATCACATCTGAAATGACCACTTCCAAA  
GCCTAAGCACTGGCACAACAGTTTAAAGCCTGATTGAGACATTTCGTTCCCACTCATCTCCA  
ACGGCATAATGGGAACTGTGTAGGGGTCAAAGCAGGATCATCCGTAGGTTGGTTCAAG  
CCTTCGTTGACAGAGTTGTCCACGGTAACAACCTTTCGGAACCTTATGCCTCTGCTGGTC  
TTTCAGTGCCTCCACTATGATGTTGTAGGTGGACCTCTGGTGAGGACCTCNGNCCNGAAC  
AACGCTTAAGCCCGNATTCTGCAGATAATCCCATCACACTTGGCGGCCGCTTCGANCATG  
CATCNTAAAAGGGGCCCAATTTCCCCCTTATAAGNGAANCCGTATTTCNCAATTTCACTG  
GNCCCGCCGNTTTTACAAACGNCGGTGAACTGGGGAAAAACCCTGGCGGTTACCCAACTT  
TAATCGCCNTTGGCAGCAC.AATCCCCCTTTTCGNCCANCNTGGGCGTAAATAACCGAAAA

16517.1.edit

ANCGNCGTCGCGGCCGANGTNTTTTCTTNTTTTT

16518.1.edit

ACCGTGGTCGCGGCCGAGGTCTGAGGTTACATGCGTGCTGGTGACGTGAGCCACGAAGA  
CCCTGAGGTCAAGTTCAACTCGTACGTGGACGGCGTGACGTGCATAATGCCAAGACAAA  
GCCGCGGAGGAGCACTACAACACCACTACCGGGNGGTCAGCGTCTCACCGTCTCTGCA  
CCAGAATTGGTTGAATGGCAAGGAGTACAAGNGCAAGGTTTCCAACAAGCCNTCCCAGC  
CCCCNTCGAAAAA.ACCATTTCCA.AAGCCAAAGGGCAGCCCCGAGA.ACCACAGGTGTACAC  
CCTGCCCCCATCCCGGAGGAAAAGANCAANAACCGTTTCAGCCTTAACTTGCTTGGTC  
NAANGCTTTTATCCCAACGNACTTCCCCNTGGAANTGGGAAAAACCAATGGGGCCAANC  
CGAAAAACAATTACAANAACCC

16518.2.edit

TCGACCGGCCGCCCCGGGCAGGTGTCCGACTCCAGCACGGGAGGCGTGGTCTTGTAGTTGT  
TCTCCGGCTGCCCAATTGCTCTCCACTCCACGGCGATGTCCTGCGATAGAAGCCTTTGAC  
CAGGCAGGTGAGGCTGACCTGGTTCTTGGTCATCTCTCCCGGGATGGGGGCAGGGTGAA  
CACCTGGGGTTCTCGGGGCTTCCCTTTGGTTTTGAANATGCTTTCTCGATGGGGGCTGG  
AAGGGCTTTGTTGNAAACCTTCCACTTGACTCTTCCCATTCACCCAGNCCTGGNGCAGGA  
CGNGAGGACNCTNACCACACGGAACCGGGCTGGTGGACTCTCC

FIG. 15XX

16519.1.edit

AGCGTGGTCCGGGACGANGTCCTGTCAGAGTGGNACTGGTAGAAGTTCCANGAACCCCTGA  
ACTGTAAGGGTTCTTCATCAGTGCCAAACAGGATGACATGAAATGATGTACTCAGAAGNGN  
CCTGGAATGGGCCCCATGANATGGTTGCC

16519.2.edit

TCGAGCGGCGCGCGGGCAGGTCCACCACACCCAATTCCTTGCTGGTATCATGGCAGCCGC  
CACGTGCCAGGATTACCGGCTACATCATCAAGTATGAGAAGCCTGGGTCTCCTCCCAGAGA  
AGTGGTCCCTCGGCCCCCGCCTGGTGTCAAGAGGCTACTATTACTGGCCTGGAACCGGGA  
ACCGAATATACAAATTTATGTCATTGCCCTGAAGAATAATCAGAAGAGCGAGCCCCTGATTG  
GAAGGAAAAAGACAGACGAGCTTCCCCAACTGGTAACCCCTTCCACACCCCAATCTTCATG  
GACCAGAGATCTTGGATGTTCTTCCACAGTTCAAAAGACCCCTTTCGGCACCCCCCTGG  
GTATGAACCTGGGAAAANGGNANTTAANCTTTCTGGCA

16520.1.edit

AGCGTGGTCCGGGCGCGAGGTCTGGGATGCTCCTGCTGTACAGTGAGATATTACAGGATC  
ACTTACGGAGAAACAGGAGGAAATAGCCCTGTCCAGGAGTTCACTGTGCCTGGGAGCAAG  
TCTACAGCTACCATCAGCGCCCTTAACTTGGAGTTGATTATACCATCACTGTGTATGCTG  
TCACTGGCCGTGGAGACAGCCCGGCAAGGACCAAGCCAAATTTCCATTAAATTACCGAACAG  
AAATTGACAAACCAATCCAGATGCCAAGTGACCGATGTTTCAAGGACAACAGCATTAGTGTA  
AGTGGCTGCCTTCAAGGTNCCCTGCTACTGGGTACAGANTAAACCACCACTCCCAAAAATG  
GACCAGGAACCACAAAAACTTAACTGCAGGGTCCAGATCAAAACAGAAATGACTATTGA  
ANGCTTGCAGCCACAGTGGGAGTATGNGGCTAGTGNCTATGCTTCAGAATCCAAGCGGA  
AAAANGTCAAGCCTTNTGGGTTCAA

16520.2.edit

TCGAGCGGCGCGCGGGCAGGTCTGGAGCTCTGCAAGTGTCTTCTTACCATCAGGTGCA  
GGGAATAGCTCATGGATTCCAATGCTCAGGCTCGAGTAGGTACCCCTGTACCTGGAAACTT  
GCCCCGTGGGCTTTCCCAAGCAATTTGATGGAATCGACATCCACATCAGTGAATGCCAG  
TCCTTACGGCGGATCAATGTTGGTTACTGCAGNCTGAACCAGAGGCTGACTCTCTCCGCTT  
GGATTCTGACCATAGACACTAACCACATACTCCACTGTGGGCTGCAANCTTCAATAANN  
ATTTCTGTTTGATCTGGACC

16521.2.edit

TCGAGCGGCGCGCGGGCAGGTCTGGTGGGCTCTGGCACACGCCACATGGGGGNGTTGNT  
CTNATCCAGCTGCCCCAGCCCCCAATGGCGAGTTGAGAAGGTGTGCAGCAATGACAACAA  
NAGCTTCGACTCTTCTGCCACTTCTTGGCCACAAAGTGCACCCCTGGAGGGCACCAAGAAG  
GGCCACAAGCTCCACCTGGACTACATCGGGCCCTTGCAAATACATCCCCCTTGCCTGGACT  
CTGAGCTGACCGAATCCCCCTTGGGCAATGGGGACTCGCTCAAGAACCCTCCTGGCACCC  
TTGTATGANAGGGATGAAGACACNACCC

FIG. 15YY

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16522.1.edit

AGCGTGGTCCGCGGCCGAGGTCTGTCTACAGTCTCAGGACTCTACTCCCTCAGCAGCGTG  
GTGACCGTGCCCTCCAGCAACTTCGGCACCCAGACCTACACCTGCAACGTAGATCAACAAG  
CCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCCAAATCTTGTGACAAAACCTCACACAT  
GCCCACCGTGCCCGAGCACCTGAACTCTGCGGGGACCGTCACTCTTCTTCCCCCGCAT  
CCCCCTTCCAAACCTGCCCCGGCGCGCGCTCGAAAGCCGAATTCAGCACACTGGCGGCGG  
GTAAGTGGANCCNAACCTTGGNANCCAACCTGGNGGAANTAATGGGCATAANCTGTTTC  
TGGGGGGAAATTGGTATCCNGTTTACAATTCCCNCAACAACATACGAGCCGGAAGCATAAA  
AGNGTAAAAGCCTGGGGGNGGCCTANTGAAGTGAAGCTAAACTCACATTAATTNGCGTTG  
CCGCTCACTGGCCCGCTTTTCCAGC

16522.2.edit

TCGAGCGGCCCGCCCGGGCAGGTTTGAAGGGGGATGCGGGGGAAGAGGAAGACTGACGG  
TCCCCCAGGAGTTCAGGTGCTGGGCACGGTGGGCATGTGTGAGTTTGTACAAGATTG  
GGCTCAACTCTCTTGTCCACCTTGGTGTGCTGGGCTTGTGATCTACGTTGCAGGTGTAGGT  
CTGGNGCCGAAGTTGCTGGAGCGCACGGTACCACGCTGCTGAGGGAGTAGAGTCTGA  
GGAAGTGTANGACAGACCTCGGCCGNGACCACGCTAAGCCGAATCTGCAGATATCCATCA  
CACTGGCGGCCGCTCCGAGCATGCAATTTAGAGG

16523.1.edit

AGCGTGGNCGCGGACGANGACAACAACCCC

16523.2.edit

TCGACCGGCCCGCCCGGGCAGGNCCACATCGGCAGGGTCCGAGCCCTGGCCGCCATACTCG  
AACTGGAAATCCATCGGTCAATGCTCTTGGCGAACCAGACATGCCTCTTGTCTTGGGGTTCTT  
GCTGATGNACCAAGTTCTTCTGGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACCA  
GTCTCCATGTTGCAGAAAGACTTTGATGGCATCCAGGTTGCAGCCTTGGTTGGGGTCAATCC  
AGTACTCTCCACTCTTCCAGTCAGAGTGGCACATCTTGACGTCACGGCAGGTGCGGGCGGG  
GTTCTTGACCT

16524.1.edit

AGCGTGGTCCGCGGCCGAGGTCCAGCCTGCAGATAANGGTGAAGGTGGTCCCCCGGACTT  
CCAGGTATACCTGGACCTCGTGGTAGCCCTGGTGAGAGAGGTGAAACTGGCCCTCCAGGA  
CCTGCTGGTTTCCCTGGTGCTCCTGGACAGAAATGGTGAACCTGGNGGTAAAGGAGAAAGA  
GGGGCTCCGGNTGANAAAGGTGAAGGAGGCCCTCTGNATTGGCAGGGGCCCCANGACTT  
AGAGGTGGAGCTGGCCCCCTGCCCCCGAAGGAGGAAAGGGTCTGCTGGTCTCTCTGGG  
CCACCTGG

FIG. 15ZZ

05636801.081000

16524.2.edit

TCGAGCGGCCCGCCCGGGCAGGTCTCGGCCAGGAGGACCAATAGGACCAGTAGGACCCCTT  
GGGCCATCTTTCCCTGGGACACCATCAGCACCTGGACCGCCTGGTTCACCCTTGTCACCCTT  
TGGACCAGGACTTCCAAGACCTCCTCTTTCTCCAGGCATTCTTGACAGACCAGGAGTACCA  
NCAGCACCAGGTGGCCCAGGAGGACCAGCAGCACCTTTCCTCCTTCGGGACCAGGGGA  
CCAGCTCCACCTCTAAGTCCTGGGGCCCTGCCAATCCAGGAGGGCCTCCTTCACCTTTCTC  
ACCCGGAGCCCTCTTTCT

16526.1.edit

TCGAGCGGCCCGCCCGGGCAGGTCCACCGGATATTGGGGGTCTGGCAGGAATGGGAGGC  
ATCCAGAACGAGAAGGAGACCATGCAAAAGCCTGAACGACCGCCTGGCCTCTTACCTGGAC  
AGAGTGAGGAGCCTGGAGACCGACAACCGGAGGCTGGAGAGCAAAATCCGGGAGCACTT  
GGAGAAGAAGGGACCCCAGGTCAGAGACTGGAGCCATTACTTCAAGATCATCGAGGACCT  
GAGGGCTCANATCTTCGCAAAATACTGCNGACAATGCCCG

16526.2.edit

ATGCGNGGTGCGGGCCGANGACCANCTCTGGCTCATCTTGACTCTAAAGNCNTCACCAG  
NANTACGGNCATTGCCAATCTCCAGAACCATGCGGGCATTGTCCGCANTATTTGCCAAG  
ATCTGACCCCTCAGGNCCTCGATGATCTTGAAGTAANGGCTCCAGTCTCTGACCTGGGGTC  
CCTTCTTCTCCAAGTGCTCCCGGATTTTCTCTCCAGCCTCCGGTCTCGGTCTCCAAGNCT  
TCTCACTCTGTCCAGCAAAAGAGGCCAGCGGNCGATCAGGGCTTTTGATGGACT

16527.1.edit

AGCGTGGTCCGGCCCGAGGTTGTACAAGCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
TT

16527.2.edit

TCGAGCGGCCCGCCCGGGCAGGTCTGCCAACACCAAGATTGGCCCCCGCCGCATCCACACA  
GTNGTGTGCGGGGAGGTAAACAAGAAAATACCGTGCCCTGAGGNTGGACGNGGGGAATTC  
TCCTGGGGCTCAGAGTGTGTACTCGTAAAACAAGGATCATCGATGTTGTCTACAATGCAT  
CTAATAACGAGCTGTTCTGTACCAAGACCTGGTGAAGAATTGCATCGTGCTCATNGACA  
GCACACCGTACCGACAGTGGGTACCGAAGTCCCCTATGCNCCT

FIG. 15.44A

000T80" T08E960

16523.1.edit

TCGAGCGGCCGCGCCGGGCAGGTCCACCACACCCCAATTCCTTGCTGGTATCATGGCAGCCGC  
CACGTGCCAGGATTACCGGCTACATCAAGTATGAGAAGCCTGGGTCTCCTCCCAGAGA  
AGTGGTCCCTCGGCCCCGCGCTGGTGTACAGAGGCTACTATTACTGGCCTGGAACCGGGA  
ACCGAATATACAATTTATGTCAATGCCCTGAAG

16523.2.edit

AGCGTGNTCNCGGCCGAGGATGGGGAAGCTCGNCTGTCTTTTCTTCCAATCAGGGGCTN  
NNTCTTCTGATTATTCTTCAGGGCAANGACATAAAATTGTATATTCGGNTCCCGGTTCCAGN  
CCAGTAATAGTAGCCTCTGTGACACCAGGGCGGGGCGGAGGGACCACTTCTCTGGGAGGA  
GACCCAGGCTTCTCATACTTGATGATGAAGCCGGTAATCCTGGCACGTGGGCGGCTGCCAT  
GATACCACCAANGAATTGGGTGTGGTGGACCTGCCCCGGGCGGGCGCTCGAAAANCCGAA  
TTCNTGCAAGAATATCCATCACACTTGGGCGGGCGGNTCGAACCATGCATCNTAAAAGGG  
CCCCAATTTCCCCCTATTAGCNGAAGCCNCATTAAACAAATTCCACTTGG

16529.1.edit

TCGAGCGGCCGCGCCGGGCAGGTCTCGCGGTCCGACTGGTGATGCTGGTCTGTTCGTCCCC  
CCGGCCCTCCTGGACCTCCTGGTCCCCCTGGTCTCCAGCGCTGGTTTCGACTTCACCTTC  
CTGCCCCAGCCACCTCAAGAGAAAGGCTACGATGGTGGCCGCTACTACCGGGCTGATGAT  
GCCAATGTGGTTCTGTGACCGTGACCTCGAGGTGGACACCACCTCAAGAGCCTTGAGCCA  
GCAGAAATCGAAAACATTCGGAACCCCAAGAGGGCAAGCCCGCAAGAGAAACCCCGCCCGC  
ACCTGGCCGNGAACCTCCAAGAAAGTGGCCACNTCTTGACTGGGAAAAAAGGGGAAANT  
ACTTGGAAATGGAC

16529.2.edit

AGCGTGGTCCCGGCCGAGGTCCACATCGGCAGGGTCCGAGCCCTGGCCGCCATACTCGAA  
CTGGAATCCATCGGTCAATGCTCTCGCCGAACAGACATGCCTCTTGCTCTTGGGGTTCTTGC  
TGATGTACCAGTTCTTCTGGCCACACTGGGCTGAGTGGGGTACACGCAGGTCTCACCAGT  
CTCCATGTTCCAGAAGACTTTCATGGCATCCAGGTGACCCCTTGGTTGGGGTCAATCCAG  
TACTCTCCACTCTTCCACTCAGAAGTGGCACATCTTGAGGTACGGCAGGGTGGGGCGGG  
GTTCTTGGCGGCTGCCCTTCTGGGCTCCCGCAATGTTCTNNGAACTTGCTGG

FIG. 15BBB

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050601-001000

16530.2.edit

16531.1.edit

16531.2.edit

16532.1.editt

FIG. 15CCC

01\_16558.3.edit

AGCGTGGTCCGCGGCCGAGGTGAGCCACAGGTGACCGGGGCTGAAGCTGGGGCTGCTGGNC  
CTGCTGGTCTG

02\_16558.4.edit

CAGCNGCTCCNACGGGGGCTGNGGGACCAACAACACCGTTTTACCCCTTAGGCCCTTTGGC  
TCCTCTTTCTCCTTTAGCACCAGGTTGACCAGCAGCNCANCAGGACCAGCAAATCCATTG  
GGGCCAGCAGGACCGACCTCACCAGTTACCCAGGGCTTCCCCGAGGACCAGCAGGACCA  
GCAGGACCAGCAGCCCCAGCTTCGCCCCGGTCACCTGTGGCTCACCTCGGCCGCGACCAGC  
CT

03\_16535.1.edit

TCGAGCGGTCCGCCCGGGCAGGTCCACCGGGATAGCCGGGGGTCTGGCAGGAATGGGAGGC  
ATCCAGAACGAGAAGGAGACCATGCCAAAGCCTGAACGACCGCCTGGCCTTTACCTGGAC  
AGAGTGAGGAGCCTGGAGACCGANAACCGGAGGCTGGANAGCAAAATCCGGGAGCACTT  
GGAGAAGAAGGGACCCACGTCAAGAGACTGGAGCCATTACTTCAAGATCATCGAGGGA  
CTTGGAGG

04\_16535.2.edit

AGCGNNGTCCGCGGCCGAGGTCCAGCTCTGTCTCATACCTGACTCTAAAGTCATCAGCAGCA  
AGACCGGCATTGTCAATCTGCAGAACGATCGGGGCAATTGTCCGCAGTATTTGCGAAGATCT  
GAGCCCTCAGGTCTCGATGATCTTGAAGTAATGGCTCCAGTCTCTGACCTGGGGTCCCTT  
CTTCTCCAAGTGCTCCCGGAATTTGCTCTCCAGCCTCCGGTTCTCGGTCTCCAGGCTCCTCA  
CTCTGTCCAGGTAAAGAAGGCCAGCGGGTCTCAGGCTTTGCATGGTCTCCTTCTCGTTCT  
GGATGCCCTCCATTCTGCCAGACCC

05\_16536.1.edit

TCGACCGGCCCGCCCGGGCAGGTCAAGGAAGCACATTGGTCTTAGAGCCACTGCCTCCTGGA  
TTCCACCTGTGCTGCGGACATCTCCAGGCAGTGCAGAAGGGAAGCAGGTCAAACCTGCTCA  
GATCAGTCAGACTGGCTGTTCTCAGTTCTCACCTGAGCAAGGTCACTGTCAGCCAGAGTA  
CAGAGGGCCAACTGGTGTTCTTGAACAAGGGCTTGAGCAGACCCTGCAGAACCTCTTTC  
CGTGGTGTGAACCTCCTGGAAACCAGGGTGTTCATGTTTTCTCATAATGCAAGGTTG  
GTGATGC

FIG. 15DDD

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07\_16537.1.edit

ACCGTGGTTCGGCGGAGGTCCACATCGGCAGGGTTCGGAGCCCTGGCCGCCATACTCGAA  
CTGGAATCCATCGGTTCATGCTCTCGCCGAACCAGACATGCCTCTTGCTCTTGGGGTTCTTGC  
TGATGTACCACTTCTTCTGGGCCACACTGGGCTGAGTGGGGTACACCGCAGGTCTCACCAG  
TCTCCATGTTGCAGAAGACTTTGATGGCATCCAGGTTGCAGCCTTGTTGGGGTCAATCCA  
GTA CTCTCCACTCTTCCAGTCAGAAGTGGGCACATCTTGAGGTACCGGCAGGTGCCGGGC  
CGGGGGTCTTGCGCGCTTGCCCTCTGGGCTCCGGATGTTCTCGATCTGCTTGGCTCAGGCTC  
TTGAGGGTGGGTGTCCACCTCGAGGTACGGTCACCGAAACCTGCCCCGGGCGGCCCGCTC  
GA

08\_16537.2.edit

TCGAGCGGTGCCCCGGGCAGGTTTCGTGACCGTGACCTCGAGGTGGACACCACCCTCAAG  
AGCCTGAGCCAGCAGATCGAGAACATCCGGAGCCCAGAGGGCAGCCGCAAGAACCCCGC  
CCGCACCTGCCGTGACCTCAAGATGTGCCACTCTGACTGGAAGAGTGGAGAGTACTGGAT  
TGACCCCAACCAAGGCTGC.AACCTGGATGCCATCAAAGTCTTCTGCAACATGGAGACTGGT  
GAGACCTGCGTGTACCCCACTCAGCCC.AGTGTGGGCCCAGAAGAACTGGTACATCAGCA  
AGGAACCCCAAGGAC.AAGAGGCATTGTCTTGGTTCGGCGAGNAGCATGACCCGATGGATT  
CCAGTTTCGAGTATTGGCGGCC.AGGGCTTCCCGACCTTGCCGATGTGGACCTCGGCCGCG  
ACCACCGCT

**0000000000**

**FIG. 15EEE**

000T80" T089E950.

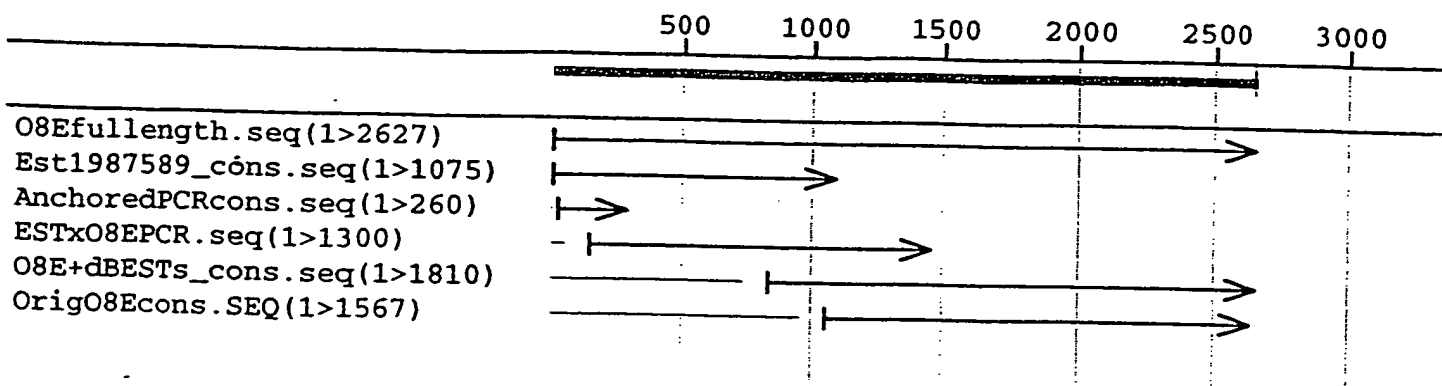


Fig. 16

AR

# O8E Epitope Mapping

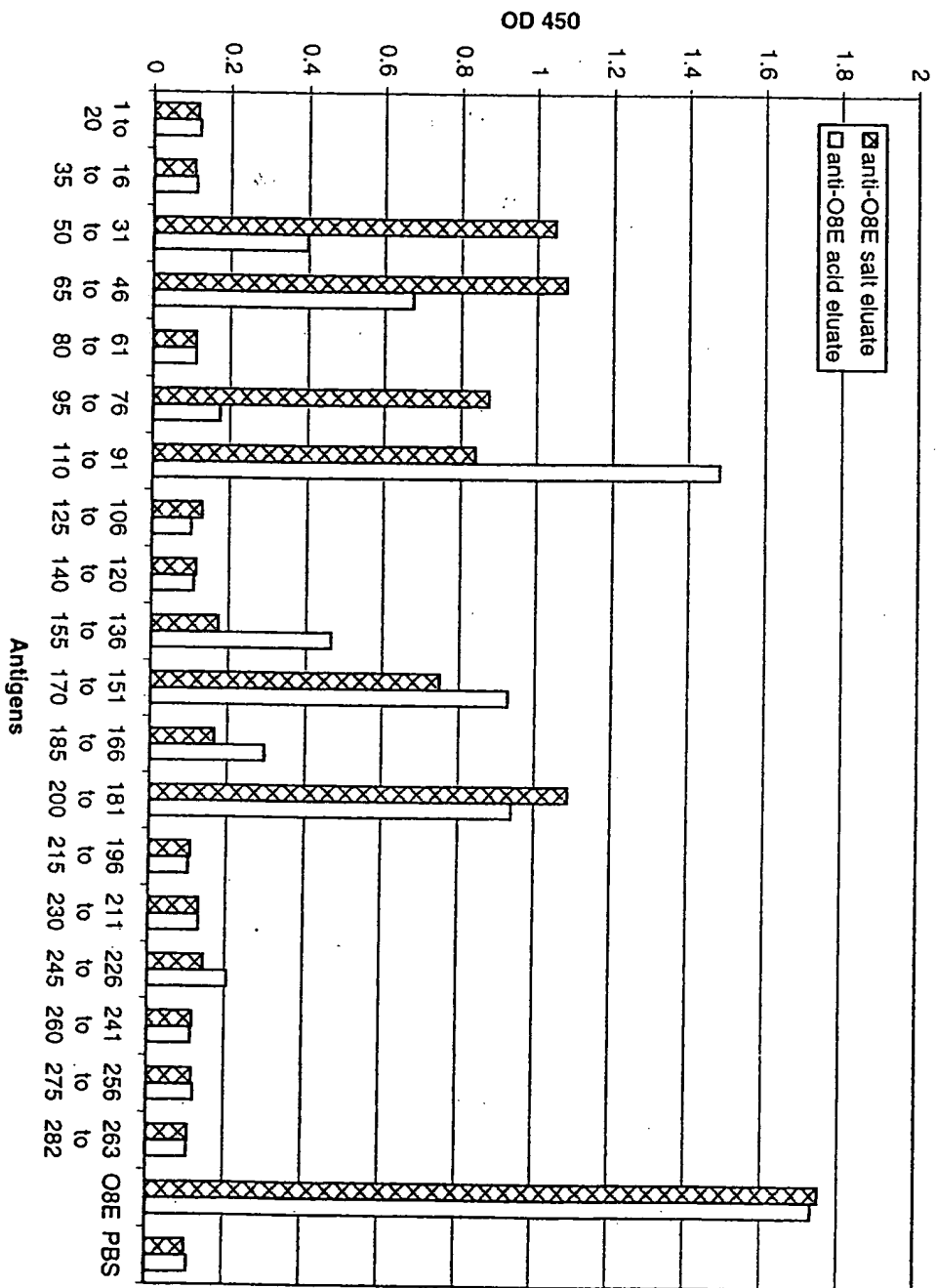


Fig. 17

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# O8E Surface Expression

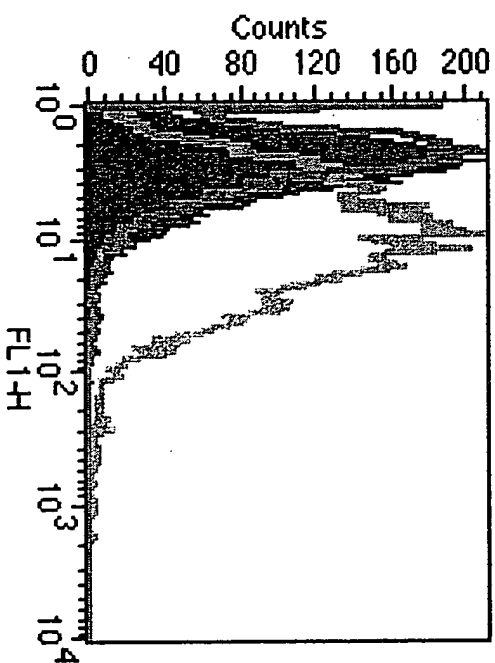


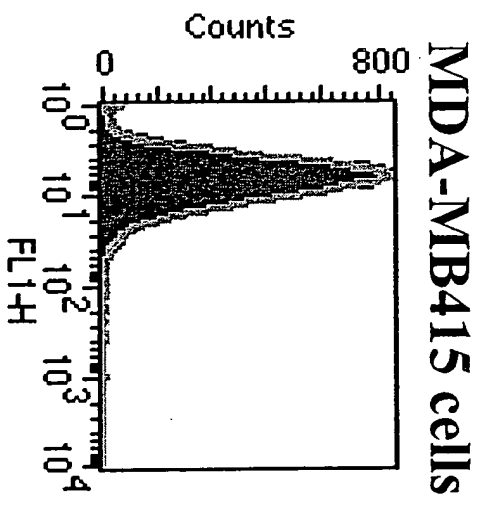
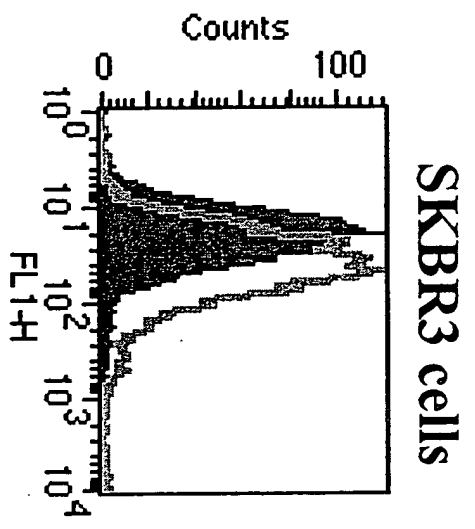
Fig. 18

- B305D/HEK stained with anti-O8E antibody
- O8E/HEK stained with anti-O8E antibody
- O8E/HEK stained with an irrelevant antibody

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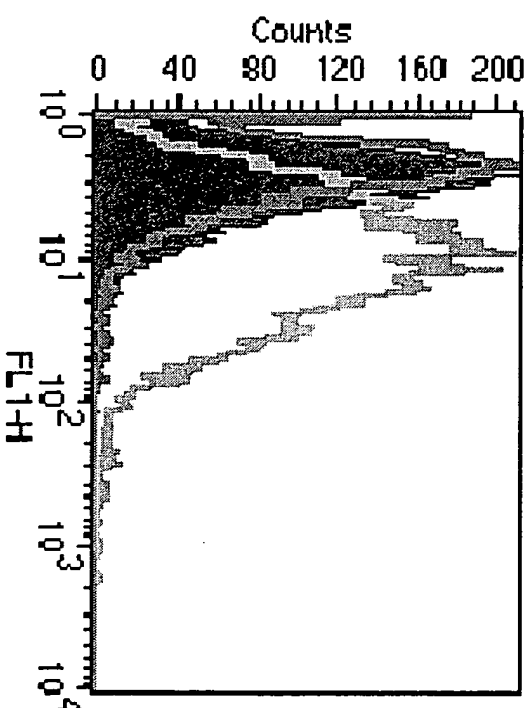
# Surface expression of O8E

Fig. 19



Blue; irrelevant antibody  
Green; anti-O8E antibody

# O8E Surface Expression



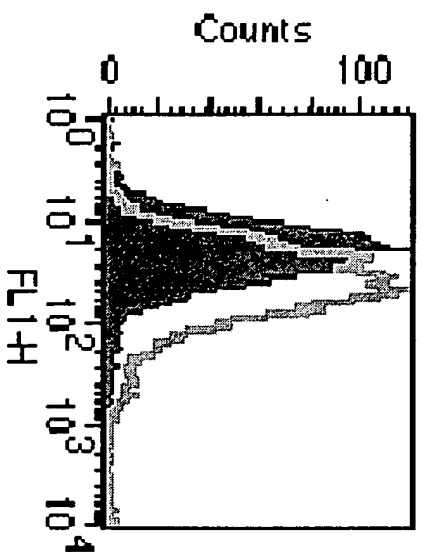
- B305D/HEK stained with anti-O8E antibody
- ▒ O8E/HEK stained with anti-O8E antibody
- O8E/HEK stained with an irrelevant antibody

FIGURE 20

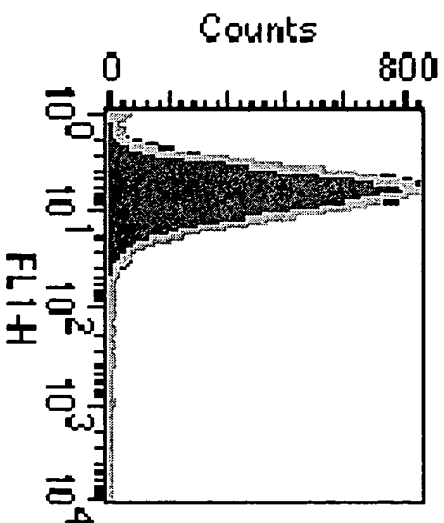


# Surface expression of O8E

SKBR3 cells



MDA-MB415 cells



Blue; irrelevant antibody  
Green; anti-O8E antibody

FIGURE 21